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COLONIAL FORESTRY AND ENVIRONMENTAL HISTORY: BRITISH POLICIES IN CYPRUS, 1878-1960

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COLONIAL FORESTRY AND ENVIRONMENTAL HISTORY: BRITISH POLICIES IN CYPRUS, 1878-1960

by

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Two quotes will suffice to close this section. A character (Larry) in O'Neill's *The Iceman Cometh* utters the following lines:

> I was born condemned to be one of those of those who has to see all sides of a question. When you're damned like that, the questions multiply for you until in the end it's all questions and no answer. As history proves, to be a worldly success at anything … you have to wear blinders like a horse and see only straight in front of you. You have to see, too, that this is all black, and that is all white.[1]

In a review of my work written by a professor at UT, the individual made the following statement as a critique of my inductive leanings:

"It is better to be wrong and interesting than right and boring."

What follows is an attempt to extract answers from the never-ending sea of questions before being buried under them, but in doing so to not succumb to the "easy out" recommended by the UT academic. Being "wrong and interesting" is a fairly simple task, often accomplished by following the advice above. As O'Neill's Larry emphasizes, history tends to reward those who are able to see clearly in black and white, with no confusing shades of gray. Unfortunately, our world has never appeared so starkly dichotomized to me. The multiple shades of gray contained within this text are therefore purposeful, and my apologies in advance if the answers are not beaming brightly in black and white.

[1]My thanks to Guha (2006) for reminding me of this passage.

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The forests of the eastern Mediterranean island of Cyprus, famous for their extent in antiquity, were described as severely damaged by misuse over the preceding centuries at the time of the British arrival on the island in 1878. The British colonial authorities sought to remedy this "degradation", and their success in doing so before their departure in 1960 has seldom been questioned. This dissertation examines this accepted history of the colonial period by utilizing archival, ethnographic, and physical data and focusing upon the British impact on the landscape as well as the relationship between the British authorities and the Cypriot people.

This reappraisal suggests several points. The British approached the Cypriot forests with certain misunderstandings and misconceptions in 1878. They believed that the majority of the forested areas on the island were unregulated commons, which they were not. They further misread the landscape by assuming that its appearance, quite different from that of a humid and temperate biome, indicated degradation. Within these concerns

of degradation, they misinterpreted the Cypriot rural economy by holding that shepherds and agriculturalists did not and could not mix. These misunderstandings of Mediterranean ecology, combined with prevailing ideas for good forest management and agricultural intensification, and hampered by inadequate budgets, resulted in policies that did not initially “return” the forests to any imagined state of past verdure, and may instead have been harmful in certain aspects.

Yet the British officials did not behave according to traditional stereotypes of colonial rulers either. The actions of many of the colonial foresters were not solely driven by a desire for instant profit; instead the majority consistently attempted to maintain and ameliorate the forests both for indirect ecosystem benefits (which they recognized would be remunerative to the island as a whole, even if not immediately to the department) and direct benefits of timber production. The meticulous records in the archives display a concern with doing what was best for the forests and for the people, which inevitably led to conflicts as to what was "fair" for the forest and "fair" for the inhabitants, however defined.

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Prologue

Along the northwestern coast of Cyprus, nestled into a hill slope and just off of the coastal road leading up to Pomos is a small village called Nea Dhimmata (New Dhimmata). It is close to being over-run by the villages on either side of it which have larger populations, and which, like Nea Dhimmata, can only expand horizontally, as the land behind them belongs to the state forests and the land facing them quickly turns into the Mediterranean ocean. It is not an often traveled path, except by the people who live along the coast line (Pachy Ammos further along the coast is famous for its charcoal making) and for those tourists from Polis and Neo Chorio who decide to take a day trip and admire the coastline and the many fruit orchards, with crops such as bananas, guavas, tangerines and grapefruit. Tomatoes and cucumbers are grown year round in the covered greenhouses that also dot the landscape.

Many Cypriots themselves do not know of the existence of Nea Dhimmata. As the village only had a population of seventy in its heyday, this is perhaps not surprising. Somebody driving along this stretch of road, however, would have to notice something unique about it, even if only as a passing glance. It boasts a design of concentric circles with a fountain in the very middle, as opposed to the typical square village center with the Orthodox church so common in Cypriot villages. Further, its buildings are constructed not of mudbrick or concrete but of clay bricks. Two story buildings, many of them duplexes, can be seen from the road, complete with chimneys. The village does have the quintessential Cypriot element, the kafenion (coffee shop), but even it is designed in a far different style than the normal corner shops one sees, as it is combined with store rooms and has a dramatic arched ceiling and huge fireplace. The church which is lacking in the center of the village is located at a distance outside of the village on a

bluff overlooking the sea coast. Traveling up the slope behind the village one sees a fairly complex system of irrigation pipes and a cistern, now largely abandoned. From the higher vantage point, one can see how the pipes once would have led to the main village fountain. The fruit orchards surrounding the village also are crossed by irrigation pipes and equipment to enable drip irrigation (installed with the help of a government initiative) along with fertilizer tanks which are now increasingly shunned because of the popularity of the organic market.

The curiosity of the passer-by as to the background of this village with a distinctly non-Cypriot architectural style and detailed irrigation system would likely be even more piqued if they realized the larger story Nea Dhimmata encapsulates. Before the existence of Nea Dhimmata, there was a Dhimmata (although it was called Paliambela by the inhabitants). It was a tiny village in the heart of the Paphos Forest. The older residents of Nea Dhimmata are still able to point out its location by tracing the route of the Livadhi (Tillyria) river valley and one of its tributaries along the Paphos forest on the modern maps, although no indication on the maps themselves remain of its former presence. Its inhabitants were traditionally goatherders as well as woodcutters. By all accounts, they were never wealthy, although they were able to survive.

However, after the British arrived in 1878 and progressively tightened the existing Ottoman regulations and created new ones concerning goat grazing and forest use, the residents' ability to adequately survive became more and more constrained. Paliambela quickly became a sticking point in the British plans for the forest. The entire population eventually decided to abandon their village and move into the newly built Nea Dhimmata in 1951. The new village had been constructed upon plans drawn up by the Forest Department and vetted by Sir Patrick Abercrombie, who described it as a positive example of rural zoning (SA1/970/1944/1). A large portion of the expenses were covered by Colonial Development and Welfare Grants from the UK, as the home office had been

swayed by the Forest Department's arguments that this village would be a "social experiment" in "civilizing" the poverty-stricken native shepherds. The village, the surrounding lands, and experts from the Agriculture Department would provide the new inhabitants with the tools and the training necessary to become successful agriculturalists. Other "backward" villages in the surrounding areas, after seeing the prosperity the residents of Nea Dhimmata earned by following a modern agricultural lifestyle would naturally want to follow suit. The newly appointed mukhtar (mayor) of the village certainly seemed to believe in this projected rosy picture, as he proclaimed "We went to sleep poor, and we woke up rich" on the day of the village's opening ceremony, with the Governor, the Chief Conservator of Forests, and the District Commissioner of Paphos in attendance (*Forest Treasures* 1951).

This is the history of Nea Dhimmata in an abbreviated form. To fully understand this unique village's history, as well as its present situation, one must place it within a much larger history, the history of the Island's forests and forest policy during the British colonial period. The purpose of this dissertation is to contextualize and detail that history. Nea Dhimmata's own specific story will be returned to at the end of this work, at which time the lessons it can teach us will be further discussed.

PART I: SITUATING THE ENVIRONMENTAL HISTORY OF THE CYPRIOT FORESTS

The forests of Cyprus are said to have provided a source of timber at many key times in history - Egyptian fleets, Greek fleets, Roman mines, and the Venetian navy all took advantage of them. During the three centuries of Ottoman rule, however, the historians record that island's forests suffered the greatest. When the British arrived on Cyprus in 1878, they described a severely degraded landscape, and a population who were fully accustomed to misusing the forests. "Experienced foresters were called in to advise the Administration on how to remedy the misuse, to repair the damage, and to plan the long-term rehabilitation of the Island's forest resources" (Chapman, in Thirgood 1987: xii). Laws were promulgated and new policies followed. The inhabitants were initially resentful of these new policies, but after several generations, "the people learned to respect the forests and to understand their wider value to the Island's economy" (Chapman, in Thirgood 1987: xii). By the time the British left, the island had an enviable forest service, and a population with a "forest conscience".

This dissertation will study the accuracy of these commonly accepted statements. Chapter 1 sets the stage by providing a description of the ecology and land use of the island, as well as more clearly defines the accepted narrative. Chapter 2 contextualizes that accepted narrative by identifying and discussing several stereotypes contained within it. Chapter 3 turns to the physical environment and especially investigates the status of the island's forests at the time of British occupation. Part II then turns to primary data to elucidate more fully what was occurring during the colonial period.

Chapter 1: Setting the Stage

Cyprus, the third largest island in the Mediterranean, occupies a strategic space between Turkey, the Levant, Egypt, and the rest of the Europe, and has therefore been ruled by foreign powers for the vast majority of its history[1]. Although lately most attention has been focused on the "Cyprus Problem", Cyprus does have other claims to fame, notably its traditional description as a forested island in an otherwise rather arid part of the world. The island's forests and goats rose to special prominence during the British colonial period, a statement supported by the fact that Cyprus has one of the oldest Forest Departments in the British Empire (founded in 1879). The work of this department is said to have been highly successful, as indicated by the practice of sending the island's foresters (primarily British, but also some Cypriots) to other colonies as expert consultants. This practice has continued into the present, as Cypriot foresters educated in the forest management style instilled by the British have found work in the FAO as forest experts for other countries. Further, Cyprus' forestry college, which opened in 1951, has trained multiple numbers of foresters from a large variety of Middle East and North African countries, adding to the island's reputation of having policies successful enough to maintain its status as a "green jewel" in its geographical context within the Eastern Mediterranean and the Middle East.

My research into Cyprus' forestry reflects a desire to understand the human-environment interactions within the Cypriot forest during the British colonial period

[1]The British were the last colonial rulers of Cyprus. They gained control of the island in 1878 as a protectorate, annexed it in 1914, made it a Crown Colony in 1925, and gave it its first chance at independence in the past two millennia in 1960. Prior to the British, the island was ruled by the Ottomans from 1571-1878. Going back further in history, the Venetians were in control from 1489 until 1571, by the French Lusignans from 1191-1489, and by the Byzantines from 330-1191. Phoenicians, Greeks, and Romans all laid claim to it in the years preceding the Byzantines.

(1878-1960). How had Cyprus come to have such a successful forestry policy, if indeed it was that successful? What steps were followed in creating the plans and priorities for these policies? What was the actual effect of the policies on Cypriots and their environment? These questions reflect a concern with resource management and conservation which continue to resonate throughout the world today.

In order to begin to answer these questions, it is necessary to have a background knowledge of the island's environment and forests. Therefore, in this chapter I will outline the most commonly accepted version of the island's environment and environmental history. I will do so by first briefly providing an ecological description of the island's forests. I also describe the primary types of land use which authors have suggested may have been found in or near the forest over the last centuries. As will be discussed in later chapters, it should be noted that several of these are perceived, rather than physically verified land uses. Following those sections, I will define the accepted narrative of the island's environmental history. This narrative is defined apart from the ecological and land use description, as it is a separate, socially constructed entity. It is informed by what it is known of the island's ecology and land use, but it also is utilized to inform those very subjects itself.

ECOLOGICAL DESCRIPTION OF CYPRUS' FORESTS

Cyprus has an area of 9,250 km^2 (3,355 km^2 of which is held by the Turkish Republic of Northern Cyprus) since 1974. About 19 percent of the island is classified as woodland (17.5 percent as State Forest and 1.5 percent as Private Forest) (see Figs. 1.1-1.4). Much of the woodland is concentrated on the steep and often rocky slopes of the island's two mountain ranges, the Troodos (Southern Range) and the Kyrenia (Northern Range). The northern slopes of the Troodos range have the largest stand of trees. Being at lower

elevations, on the sun slopes, and Miocene bedrock, the southern slopes of the Troodos range probably never were as densely forested. The northern sector is generally higher, with a plateau rising up to the Troodos crests (1953 m, maximum elevation), and the bedrock is igneous (Plutonic and mainly acidic), with poorer soils but reduced groundwater infiltration (see Fig. 1.5). The primary tree species today include two types of pine, *Pinus brutia* and *P. nigra*, while other species represented in smaller amounts at various locations on the island include *Cedrus libani* spp. *brevifolia*; *Cupressus sempervirens*; *Juniperus foetidissima* L., *J. oxydecrus* L., and *J. phoenicia* L.; *Pistacia lentiscus, Platanus orientalis*; *Alnus orientalis*; *Quercus alnifolia*; and *Arbutus andrachne* (National Report 1997). In the Troodos Range, *Pinus brutia* grows until about 1220 meters, at which height *Pinus nigra* (also called the Troodos Pine by Thirgood 1981) often appears. The only location in which *Cedrus brevifolia* is found on the island is within a small area of the Troodos Massif, and although currently protected, it is presumed to have suffered deforestation in the past. A detailed description of the current location of the island's other tree species can be found in Thirgood (1987: 35-38) and Tsintides et al. (2002). These include stone pine (*Pinus pinea*), several additional species of oak, including *Quercus lusitanica* and *Quercus coccifera*, walnut, maple, black poplar, *Pistacia terebinthus*, myrtle, wild olive and wild carob, among others.

Thirgood (1987: 32) provides a detailed description of the modern accepted view of past forest composition. Strongly influenced by Clementsian ideas of equilibrium ecology, he states that originally the island must have been covered in climax trees, including *Juniperus phoenicia, Quercus calliprinos, Cupressus sempervirens*, and *Cedrus brevifolia*, but that now invading species such as *Pinus brutia* comprise the bulk of the forest. He also provides a hypothetical map of the climax vegetation divided into twelve zones created by a British based technical service. There are unfortunately few resrouces with which to test the validity of these suggested climax vegetation types.

Turning to accounts of the island's past vegetation, written accounts begin with the classical authors. They do not provide many specific details apart from stating that the island was forested, and that its trees were used for shipbuilding and metal working (see Strabo, *Geography* 14.6.5). The Cyprus cedar also is specifically mentioned, although there is disagreement today as to whether the term refers to the island's cedars or to the island's cypress (Thirgood 1987:71). The trees which are described over the centuries following the classical period commonly include pines, cypress, carobs and olives. At the time of the Ottoman conquest (1571), a description of the fuel woods present on the island by Etienne de Lusignan includes olive, carob, cypress, juniper, pines, kermes oak or *Pistacia terebinthus*[2], *Pisticia lentiscus*, oak, and Mediterranean hawthorn (*Crataegus azarolus*) (Thirgood 1987:332). It was already common by that time period to describe the mountain forests as being one of the only places to find water year round, as the island's "rivers" would dry up over the summer[3].

Bars'kyj, a Russian monk, spent three months in 1735 traveling from monastery to monastery in order to avoid contracting an outbreak of the plague in the more populated cities of the island. His descriptions of the monasteries within the mountains often include comments about dense forests and also well-maintained monastery gardens. Alternatively, his descriptions of the monasteries located on the plains frequently note the lack of trees (Grishin 1996).

By the mid 1700s, Drummond, the British consul in Aleppo, describes seeing large pines, "small firrs", syacamores, elm, walnuts, almonds, Mediterranean hawthorn, and *Arbutus andrachne* in the Southern Range, and he notes that he saw cypress for the first time in the Northern Range (Martin 1998: 87-92). J. Sibthorp, a botanist and professor of Rural Economy at Oxford, visited the island in 1787. He describes the Northern Range as

[2] The text is not clear.
[3] See Appendix IV for a more detailed summary of many of the traveler's accounts.

covered with *Pinus pinea*, cypress, and *Arbutus andrachne*. The timber trees of the Troodos mountains are found in the higher regions which are covered in *Pinus pinea* mixed with *Quercus ilex*, and in the valley below which has scattered *Quercus aegilops* trees (Martin 1998: 107-116; Thirgood 1987:73-74). For firewood, "the carob, the olive, the Andrachne, the Terebinthus, the lentisc, the kermes oak, the Storax, the cypress, and oriental plane, furnish not only fuel in abundance for the inhabitants, but sufficient to supply, in some degree, those of Egypt" (Martin 1998: 116).

Moving into the 19th century, the botanist Kotschy visits the island in 1840, 1859, and 1862 (in conjuction with Unger). In his description of his 1859 visit, he speaks positively of the landscape near Buffavento in the Northern Range, noting the presence of many half grown and several old cypress trees on the slopes to the southwest of the monastery, as well as walnut trees in the valley rising up to the monastery. He notes that the cypress trees are likely present because no goats graze in that area, but he makes no further comments about livestock than that (Pohslander 2006: 89-90).

Kotschy also travels to Mount Olympus in the early part of April, and he states that "the whole northern slope from the high mountain down to our path is covered with dense forests of deciduous trees and green spruces …. Bushes of olive, myrtle and others common in Mediterranean flora lined the sides of our uneven and partly rocky path" (Pohlsander 2006: 92). He describes the valley bottom near Evrykhou as well as the lower slopes as being cultivated and irrigated, while the higher slopes were planted in mulberry trees and grape vines. The farmsteads surrounding the area appeared prosperous to him (Pohlsander 2006: 92). Unger and Kotschy's (1865) book provides a more general description of the timber forest of the island (i.e., the pine forests in the Southern Range), stating that two to three hundred year old trees are the prevailing type present, while saplings are rare and young trees uncommon. It is difficult to find a tree which does not have either mutilated bark or wood or a charred trunk (484-500). Unger in 1866 notes

that on account of the Turks, the forests have been pushed back to the most inaccessible places on the island (Pohlsander 2006: 103-104).

De Montrichard, a French forester who visited in 1873, states that the trees present on Cyprus are the same species as those described by de Lusignan in the 1570s. In terms of timber production, the Northern Range only has small scraps of forest, so the Southern Range, with its two dominant pine species, holds the most important forest stands. The density of the black pine which grows on the highest slopes is sparse, and the majority of the trees are of an old age, as the black pine does not fully mature until over 250 years of age. The Aleppo pine begins where the black pine ends and can be found as low as the villages and the herds of animals allow it. The only old trees of this species which can be found are twisted or corrupted. Growing among the pines one can also find rock rose, from which ladanum can be obtained, as well as arbutus, juniper, yews, and wild olive and carob trees as one reaches lower elevations. One can also find several species of oaks (*calliprinos*, *cyprica*, and *infectoria*) as well as bay trees, myrtles, maple, elm, and plane, especially in the mountain valleys (De Montrichard 1874: 40-41).

Traveling ahead several decades, Hutchins produced a written work and a forest map (Fig. 1.6) based upon a 1909 visit to the Island and he mentions the same general species as above. The forests on the Southern Range are partly classified as “timber and scrub”, and he notes that the number of cypress in the State Forests is quite limited. Even the best forest tracts according to the 1909 map are a mix of old and new stands, often widely spaced. Hutchins specifically notes that portions of the Southern Range pines were worked for resin during the Venetian period usually resulting in the the death of the tree, but that a fine forest had regenerated in that area since then.

Subsequent forest maps produced by the Forest Department (1913 – Fig. 1.7, 1938 – Fig. 1.8, 1946 – Fig. 1.9) replicate the 1909 forest boundaries with minimal change, but

no longer distinguish “timber” versus “timber and scrub”, and also include tracts which Hutchins had described as *Lentiscus*, pine scrub, olives and carobs under the designation “forest”, providing insight into how the term “forest” was defined under British colonial rule. This conforms to the Kitchener topographic map (Kitchener and Grant 1885), representing conditions in 1882 (Fig. 1.10). The Forest Department *Annual Reports* from these periods provide the same general description of species as that utilized today.

Describing the forest species at the end of the British period, Christodolou (1959) supports the earlier statements by noting that the Troodos Massif, especially the western half, is the location for most of the real forest of Cyprus. This forest is sometimes dense, contains mature stands, and is composed primarily of Aleppo pine (*Pinus brutia)*; although the Troodos pine (*Pinus nigra*) is also found in the Khionistra area. Besides these species, cistus, golden oak, and other maquis make up the large “forest” areas. Christodoulou states that vine cultivation and grazing had caused the forest to retreat in modern times, although the British presence stabilized much of the deforestation (206).

Based upon these descriptions (for further examples, see Appendix IV), the dominant tree species in Cyprus do not appear to have dramatically changed over the past five centuries. The mountain forests were primarily covered with pines, with scattered amounts of cedar, oak, and juniper interspersed. The specific species of pines and oaks do vary among authors, but that variance may reflect issues in identification as much as it reflects a physical change in the type of trees. As hinted at by some of the descriptions above, some suggest that the forests’ density and quality, and in some cases, their general geographic extent, have changed over the years. However, despite the hypothetical claims, there is little hard evidence on these past conditions. The accepted narrative regarding these changes is described in the environmental history discussed later in this chapter.

LAND USE DESCRIPTION

Besides a general background to the flora of the island, a brief description of the land use practices that could impact the forests is also necessary. Apart from forest industries, goatherding and vineyard plantations are frequently said to have "encroached" into the forest areas. Turning first to the forest industries, wood-cutting activities and the collection of items such as resin, bark, various seeds, herbs, stones, and soil, has been described for centuries. As Wild (1879) notes in his report on the forests, it appears that by the time the British arrived on the island, a forest economy of long standing already existed. As more specific examples, it has already been noted that the classical authors suggested that the island's trees were employed in shipbuilding and metal production. Dioscorides, in *De materia medica* 1.97, describes the ladanum on Cyprus as being among the best. It was gathered from the rock rose plant, *Cistus creticus,* which can be found on the island's mountain ranges by driving the goats through the plants in the spring. The ladanum would stick to the goats' beards, which would then be cut and boiled to obtain the substance (Tsintides et al 2002: 289). The manufacture of an oil from the oregano plant (*Origanum dubium*), easily found within the Southern Range, is still carried out today, and appears to have been an industry for many centuries (Tsintides et al 2002: 371).

Travelers as early as the 15th and 16th centuries also mention the fuelwood and herbs present on the island, as well as the manufacture of turpentine (or pitch, or resin) and the presence of various metals, including iron, copper and asbestos within the forested mountains. Although growing only on the lower slopes, the pods of carob trees formed a sizable export for centuries, and various candies and syrups are still made from this plant. The collection of terra umbra is also noted by Drummond in 1754, and Pococke (1745) mentions the utilization of a small insect which grew on the kermes, or holly, oak to

produce a red dye[4]. The silk industry, which has played a role of varying importance on the island since at least the Venetian period, depended upon the cultivation of mulberry trees for the feeding of the silk worms and the travelers and officials frequently note the presence of mulberry trees among villages and monasteries. The Venetians are frequently stated to have utilized large quantities of timber for shipbuilding, but I have not found information to support this claim. Presumably, the Cypriot themselves would have been utilizing timber for their own shipbuilding, although this activity is nto discussed within the forestry accounts. Further, the brief interlude of Egyptian rule in the 19th century during the Ottoman period is also said to have led to the deforestation of many of the lowland scrub forests along the coast.

Near the close of the Ottoman period, de Montrichard (1874: 38) provides an estimate of the amount of wood used on the island for a variety of purposes. In descending order of amount utilized, the list includes firewood, fuelwood for steam engines, charcoal production, resin collection, construction, exportation to Egypt of a variety of sizes of wood pieces, and house rafters. He notes that the Cypriots are loath to use a saw, and that the fashioning of the rafters with an ax wastes an equal amount as that utilized in the production. He also describes the bark of pine trees being utilized for tanning purposes[5], but states that the statistics about bark collection and the profits made from it are too uncertain to estimate. A few years later, the forest economy outlined by Wild (1879) includes wood-cutting, charcoal production, resin tapping, and the manufacture of wooden items, which would have included a variety of items such as plows, ropes and framework for water wheel wells, bread boards, and dough troughs. A total of 320 woodcutters and 63 resin extractors are estimated to be living in the villages surrounding the Southern Range forests. Many of these traditional uses of the forest are limited with

[4] Little is said about this dye by the British period, and unfortunately the earlier accounts do not provide details as to the amounts produced.

[5] Bark from oak trees also was popular for this purpose throughout the Mediterranean.

the advent of British rule, and from time to time some of the traditional aspects of the forest economy are completely prohibited, as will be seen in the following chapters. By the late 1950s, approximately two-thirds of the island's timber needs were met from the forest (Christodoulou 1959:113), but that percentage is sizably smaller today on account of shifted policies, including the realization that an increased push for forest exploitation in the 1950s-1970s was not sustainable.

Turning to goat grazing, Cypriots practiced a form of transhumance for millennia, with some of the island's shepherds taking their flocks into the mountains annually over the summer and winter[6]. Christodolou (1959) (still the best known author on Cyprus land use) states that, "Livestock has always been important in Cyprus and pastoralism is probably more ancient than cultivation. Neolithic culture shows strong pastoral influence" (179). Venetian records indicate that cheese, skin, hides and wool were produced. Pastoralism allegedly increased during the Ottoman period "with the decay of agriculture and stagnation of other economic activity" (185). Reflecting Mediterranean common law, according to the Ottoman Land Code flocks could graze over stubble and uncultivated land, as well as graze in forests. The Ottoman code also allowed for communal grazing grounds. Further, flocks were a source of security "in those days when the whim of the unpredictable local officials was 'law'" (185), a situation which some suggest occurred during the Ottoman period (for example, see De Montrichard 1874, Hill 1952).

By the 1950s, livestock products amounted to £7 million annually, which was over a quarter of the total output from agriculture. A further £2 million worth of livestock products were imported annually (Christodolou 1959:179). Christodolou (1959) states that the pasture from uncultivated areas consists of grass steppes, dwarf-shrub steppes,

[6] On Cyprus, free range forest grazing in the mountains was the sole domain of goats – the steep slopes and available woody vegetation were not very suitable for sheep, cattle, or pigs.

garigue and maquis. The annuals and scrub are abundant in winter and spring, and they are present especially in "the Kafkalla country, mesas and buttes, from which the terra rossa soils have been removed; in the Kyrenia Range, the Chalk Plateau, and in the Massif the grazing grounds are steep slopes and areas of thin soil" (1959: 180). These grounds total 1,400,000 donums (approximately 188,988 ha). Pasture from cultivated areas includes leaves from trees and bushes (for example, apricot or mulberry trees) and vines and discarded vegetables. Stubble (1,350,000 donums, or 182,109 ha), cultivated fodder crops (630,000 donums or 84,984 ha), and fallow land (1,200,000 donums or 161,874 ha) also provide feed. Cultivated fodder crops were never highly popular on account of their unreliability owing to the amount and incidence of rainfall, and their similar times of availability, late winter and spring, as natural pasturage (1959:180-181) [7].

Although outside the scope of this dissertation, the issue of growing locally sufficient fodder to supply to all livestock has remained a cause of concern. In terms of the effect of the land use patterns on the forest, the restriction of goats from the mountain forests as well as the minor forests on the lower elevation lands plays a large part in the island's history. Today, no goats are allowed to graze in the delimited areas of the forest, except in the case of Akamas, in which the flock owners have an old agreement with the Forest Department. The Forest Department has been trying to remove them, but the Agriculture Department has been subsidizing the owners. Illicit grazing also occurs in the Randi and

[7] There are few estimates of the number of goats and sheep on the island prior to 1878. Madon suggests a dramatic increase several decades prior to the 1880s to help explain the level of recent forest degradation (Madon had estimated that the Southern Range forests including the Makheras Forest and the lowland forests had been destroyed in the mid 1800s), but this is a classic circular argument as will be further discussed in the next chapter. The number of sheep and goats are counted annually by the British, however no distinction is made between tethered and free-range goats. Further, apart from the Forest Department's record of the number of goats and sheep it allowed into forest land, there is no way to distinguish between animals grazed within the forest and animals grazed on the plains. This double lack of data regarding the location and type of goats greatly complicates attempts to study the grazing situation.

Orites forests, although the Forest Department does not strictly prosecute the offenders (Michaelides 1999: 58).[8]

Turning to vineyards, although the main wine growing areas today are located to the south of the forests on the Southern Range, early travelers to the island frequently commented upon the beauty of the mountain valleys in the Southern Range, especially the Solea valley, with its terraced hillslopes and fruit orchards and vine cultivation. The chronologically continuous nature of these comments combined with the multi-century presence of villages in those areas support the view that vineyard cultivation in the forests was a traditional type of land use in the forest. Kitchener's 1885 map, which marks the areas in which his team found vineyards, also suggests an extensive grape culture within the mountain slopes (see Fig. 1.10). The early forest officials hired by the British government, such as Wild and Madon, noted the tendency to practice "fitful" cultivation, both of vineyards and of cereals[9]. On account of concern that the vineyard owners might be likely to damage the forests by clearing areas for new plantations, as well as a belief that vineyards were less profitable and environmentally valuable in terms of climatic benefits than trees, many vineyards were included within the delimited forest land during the 1880s and 1890s so that they could be turned into forest land. Those inhabitants who had depended upon them as a form of livelihood were forced to find other sources of income. The same is presumably true regarding any cereal cultivation in the forest areas, although apart from some scattered references and several locations which appear to have had threshing floors (see Given 2000, Given and Knapp 2003), there are little firm data on this topic. Strict policies regarding the use of forest land today ensure that no new vineyard cultivation is occurring within delimited areas. However, on private slopes

[8] Officially, there are seven National Forest Parks, three at coastal areas (Liopetri, Cavo Greco, and Akamas), three around Nicosia, and one at Troodos, as well as two Nature Reserves at Troodos, one (Tripilos) includes the Cedar Valley. The Troodos National Forest Park has an area of 90 km^2.

[9] It should be noted that the mountain slopes are quite steep and a successful vineyard in many areas also necessitates the construction of a terrace.

outside of the forests, vineyard production is still practiced, and in some circles it is receiving increased interest as it is being presented as an environmentally friendly activity[10]. It is hardly necessary to note in this context the frequency with which ideas surrounding conservation and preservation have changed over the past century.

THE ACCEPTED ENVIRONMENTAL HISTORY NARRATIVE DEFINED

With that outline of the island's trees and land use, we can now turn to the accepted narrative regarding the environmental history of the island. The current form of this history begins to coherently emerge in the mid 19th century with reports such as that of Unger (Unger and Kotschy 1865) detailing an irresponsible forest economy in which trees were mutilated by resin collection but also by poor woodcutting practices. Von Richter, a young German traveler, had foreshadowed such an issue in 1816, when he was told that the Cypriot landscape was headed for destruction since the forests were being destroyed by greed and a lack of order, which in turn would lead to the drying up of springs, a reduction in rain, and mass emigration leaving wasteland and marshes where before there were villages and gardens (Pohlsander 2006: 23). Although neither von Richter (1816) nor Unger and Kotschy (1865) strongly emphasize the effect of goats, de Montrichard (1874) is representative of later accounts in his concern with the perceived damages caused by goats in the forest. British authors and forestry officials continued to expand this story over the ensuing years of colonial rule. Regardless of what other types of changes in received history have occurred since independence in 1960, this environmental narrative has been carried into modern-day Cyprus with only a few minor tweaks.

[10] In those areas in which vineyards have been abandoned, one often sees an invasion of pines, conforming to the inhabitant's accounts of a cyclical practice of clearing areas for vineyards and then allowing them to return to forest areas after the productivity of the vines decreased (i.e., the disliked "fitful" cultivation above).

According to this history, the island was once completely forested, including the Mesaoria, the plain formed between the two mountain chains. As noted within the ecological description, there are several references to Cypriot forests by classical authors, often no more than a few lines easily taken out of context, and the vast majority of authors writing on Cyprus cite these sources unquestioningly[11]. The primary author cited is Eratosthenes, and the passage itself is preserved by having been quoted in Strabo (*Geography* 14.6.5). He states that the plains were formerly so heavily forested that the trees prevented cultivation. The timber necessary for mines helped to clear the surface, as did the construction of ships. However, these means were still insufficient, so permission was given to clear land and then hold it as one's own, free of taxes. Suggesting a slightly different picture, Theophrastus states that steps had to be taken to conserve the forests following Alexander's conquest of the island and use of its wood for shipbuilding. Later classical sources return to praising the fertility of the island for shipbuilding (such as Ammianus Marcellinus, Book 14), and multiple later authors argue that Greek and Roman mining practices on the island must have utilized a sizable quantity of wood.

The history continues by stating that at the close of the Roman period (330 CE), which during its heyday supported a population of anywhere between 1 million to 3 million people (according to authors such as De Montrichard 1874), the forests were granted a general reprieve for centuries from widespread further destruction, although their extent had already been limited during the previous centuries. Little, if anything, is said about the Byzantine period. Many assume that the population dramatically decreased following the Roman period, and therefore the stress on the forests would have been reduced, although firm data for this suggestion are not available. The Lusignans, while being frequently described as making large sums of money by exploiting the island's fertility,

[11] As with all histories, one can find exceptions to most of these general statements if one consults enough authors. See Appendix IV for further details. Having said that, the points I present reflect the history as it is most commonly presented in forestry reports and to the general public today.

nonetheless are rarely blamed for causing any widescale damage in the forests, although most authors suggest that forests near populated areas would have suffered during these periods. The Venetians (1489-1571) have not been presented in such positive terms, however, since as previously noted they are blamed with ruthlessly attacking the forests for their shipbuilding needs.

The history continues that the Ottomans (1571-1878) did not improve upon the situation. It is said that they were the poorest rulers of all of the prior rulers, and the forests suffered greatly. Thirgood (1987: 73) provides a typical summary: "Under the rule of the *Porte*, marked as it was by a long period of economic and cultural decline, the remaining forests became a no-man's land in an impoverished subsistence economy, free for all to use and misuse and protected only by their remoteness". Modern Cypriot authors also commonly point to Ottoman mismanagement: "When Turkey left Cyprus in 1878 the forests according to historical evidence were in a very degraded and desperate condition due to thorough Turkish neglect" (Michaelides 1999: 4).

The history states that the wretched living conditions under the Ottomans led many Cypriots to flee abroad. Droughts and disease outbreaks are noted in the context of the general misery of the island and why people left, but they are not connected to the health or the use of the forests. Intriguingly, the depopulation itself is not assumed to have allowed for forest recovery, as in the earlier periods, but rather it is assumed to have heightened the forests' destruction. The history projects that in this state of depopulation and inadequate rule, the forests, although officially belonging to the Ottoman state, were allowed to fully turn into a no-man's land, an unregulated commons, free for all to use and abuse.

This forest abuse is said to have taken a number of forms. Accounts during the period focus on the number of fires set in the forest, the number of trees scarred by attempts at pitch extraction, and the fitful cultivation and destructive woodcutting carried out by the

ignorant peasants who either did not realize that damage was actually being done or did not care. Destruction on account of mining or shipbuilding is only seldomly mentioned.

Above and beyond these factors, however, the history focuses upon the role of the goats in this destruction. As suggested in the land use history, which in turn draws its support from this narrative, many suggest that the instability of the Ottoman period led to an increase in pastoralism – since the Ottomans placed such a large tithe on vegetable and fruit produce, and the actual amount demanded depended upon the whimsy of the tax collector, it was safer to have one's property on foot, or rather hooves (see De Montrichard 1874, Hill 1952, or Christodoulou 1959 for a presentation of this argument). De Montrichard (1874), Baker (1879) and Madon (1930 [1880, 1881]) are often cited by later authors for their strong condemnations of the negative effects of these large forest grazing flocks, as they argued that the grazing of the goats on the young tree shoots would guarantee the final destruction of the forests.

When the British arrived, the history states that the island was in environmental shambles. As opposed to what the British officials had read in the classical sources, the Mesaoria was not tree covered, and the few forests which did remain were still in existence because they were in generally inaccessible areas. Further, the remaining forests were poorly stocked. The trees were very widely spaced, there was a preponderance of old growth and very little young growth, understory was missing on the highest peaks, and non-timber trees, such as the golden oak and arbutus, had invaded what they assumed to have been pure pine stands in the not-so-distant past. The British found support for their perception of degraded forests by drawing upon while at the same further solidifying the forest descriptions noted above, especially those by authors writing

in the decades just prior to British rule. As these authors stressed an unregulated forest commons with a large number of free range goats, so did the British accounts[12].

Even if one had suggested that perhaps some of this degradation was in fact a matter of a misplaced perception made by authors who were accustomed to non-Mediterranean landscapes, which, notably, no one did, the population of the island and beliefs as to its past population would have been utilized to quell any doubts. At the time of occupation the size of the island population was only estimated to be around 186,000. Following the interpretation of the classical sources, the history hold that forests had been extensive enough to sustain a population at least ten times that size in the past. Since the inhabitants were forced to import wood to fill many of their needs by the British period, the authors assume that something drastic must have happened to the forests in the preceding years.

Thus, as the history goes, the British administrators viewed it as their job to stop this potentially non-reversible environmental degradation as quickly as possible. In the case of the forests, this meant making Orders in Council within the first year that no island timber could be imported into the main towns and that steam engines could no longer run on island fuelwood. A Forest Department was also in place within 12 months, and the basic forest laws necessary to claim the forests as state owned and to limit uses within them were promulgated in 1879 and 1881. A key early desire was to force non-property owning shepherds to stop “ruining” state lands for their own individual livelihood (or, using other colonial terms, ruining land which was being held for the good of all people to satisfy their selfish and lazy desires). Reforestation (or afforestation depending upon one’s beliefs regarding the previous extent of the forests) was started yet in late 1878

[12] Comments similar to those contained within de Montrichard (1874) regarding goats can be traced through Löher (1878) to Baker (1879) to Madon (1880, 1881) and into the forest reports following, by which time the description functioned as a fact so well known that it was unnecessary to question it. Further, Unger and Kotschy’s (1865) description of mutilated trees also appear in these later authors.

with the planting of eucalyptus seeds received from other British colonies in forest nurseries for transplant among the main towns.

In the minds of the officials, as well as the educated elite, "preserving" the existing forests and replanting the areas they believed should be forests was not only important for timber exploitation, but also because of the positive effects which the forests would have on the climate, especially the rainfall. Cyprus needed water to be profitable agriculturally, agricultural productivity would in turn raise the standard of living for all, and therefore preserving the forests would serve a great economic role. Examples of deforestation and general environmental degradation on account of goat grazing on St. Helena (often utilizing Darwin's descriptions) were presented to the colonial officials to further convince them of the necessity of this work. As the years progressed, the British also increasingly argued for the necessity of teaching Cypriots to appreciate their environment – specifically, to have a "forest conscience" – in order for actions to ensure the protection of the forests to fully occur.

Various starts and stops are usually recognized within the narrative during the colonial period, and there are two common versions of when the forest started to improve from its degraded state. In accounts by British officials, the forests started to improve immediately at the time of British occupation, and the story since 1878 represents a triumphant battle of forester over landless shepherd and ignorant peasant. A standard example of the British version of the history is presented in the annual *Cyprus Report* from 1931. It states that,

> At one time Cyprus was famous for its forests. During the Turkish administration, when their value was not appreciated and the science of silviculture not understood, they gradually declined, and visitors to the island in the seventies were horrified by the spectacle of desolation which they presented. Since the British occupation in 1878, there has, however, been a considerable improvement and artificial reafforestation has been carried out (*Cyprus Report* 1931: 17).

For later Cypriot authors slightly more critical of the British presence (for example, Polycarpou 1969, Michaelides 1999), true improvement did not happen until around the beginning of World War II, when a particularly unpopular director of forests retired, increased funding was provided by the British home office, and adequate publicity and public relations were practiced in communicating with the natives.

Regardless of when the forests started to improve, the factors that were causing them to be degraded in all versions are goat grazing, fires set by shepherds for improved pasture or in revenge for the restrictions placed upon them, and illegal woodcutting and resin collection. Further, both versions state that by the mid to late 1940s, almost all free-ranging goats were removed from the Southern Range forests, work was progressing on removing the goats from the smaller Northern Range forests, and the Cypriots had a "forest conscience", displayed via their love of recreational trips to the forest and their involvement with Arbor Day festivals, for example. Apart from additions for the work that has been done since Independence, this is still the same narrative employed today: put in simple terms, it states that "Whatever other messes the British may have made on Cyprus, they certainly did good things for the forests. They rescued them from Ottoman misadministration and ensured that Cyprus still has some forests remaining today".

POPULARITY OF THE ACCEPTED HISTORY

The accepted Cypriot environmental history, with its ever-present but rarely clearly stated stereotypes, can be quite seductive to a modern audience. The popularity of Thirgood's 1987 work, by far the best known secondary source on the island's forests during the British colonial period, is proof of this. As Thirgood argues and many seem to agree, the ability of the British colonial government to turn back an island's forests from the brink of destruction on account of its officials knowledgeable in the scientific forestry

practices of Western Europe, developed and practiced in India, provides a good lesson for modern readers. This educational lesson emphasizes the "consistency and persistence with which the declared policies were pursued" until success was reached (Thirgood 1987: xvi), as well as that the declared policies continuously emphasized the concepts of "multiple-purpose forestry" and "social forestry", concepts Thirgood suggests only recently have become popular in the rest of the world (xvi, 109).

Along with its potential for serving as an educational success story, part of the appeal of this history may be in its clearly identified characters. The colonial foresters and later the agriculturally minded Cypriots – agriculturally minded because the British education had imbued in them the importance of agriculture – are the protagonists, facing a battle against the antagonists, i.e. the unenlightened Cypriots. Other players are involved from time to time, such as other colonial officials outside of the Forest Department and even outside experts sent by the Home Office to report on the situation, but the main drama continuously unfolds between the team formed by the educated forester and educated native against the ignorant native, especially the native grazier. The final scene in this lesson consists of the native not only recognizing the wisdom of the British, but actually adopting that wisdom and taking the British forester's place in continuing with the grand upward progression of forestry.

What reader with a colonial bent would not be drawn into such a compelling and universally applicable story as this? One can almost imagine a modern movie made telling the tale, only one need not imagine, as the British did make such a movie – *Cyprus is an Island* (1946) directed by Ralph Keene with a screenplay and book by Laurie Lee (1947). The British government had sent them to Cyprus to produce a propaganda film to present to the people back home as an example of their successful efforts in the colonies.

A viewer of the film is first presented with the tale of the island's multi-century environmental degradation. The main plot of the movie then begins, a tale of an

antagonist (the native grazier, a lazy, single man) ruining the efforts of two protagonists: the rural Cypriot farmer working industriously to feed his small children by following the colonially encouraged and accepted practice of agriculture, and the Forest Department. The lazy shepherd destroys the farmer's crops by allowing his flocks to graze over them, and destroys the forests by lighting fires of revenge when he is told that his goats can no longer graze in the forests either. To ensure that the viewer fully understands the history, scenes are also filmed in a mountain village[13] in order to illustrate the squalor in which these poor ignorant shepherd people live. The audience is shown what is said to be a typical dance of these people, one which illustrates murder, and the voice-over notes that their songs are of "feud and murder". The implication is clear - these are the wild and ignorant mountain people whom the colonial government is doing its best to civilize and tame.

The film also pictures a village of successful farmers living near the forests. Some of these villagers may have been shepherds in the past, but they had learned that the shepherd lifestyle was not acceptable. The inhabitants of this village are happy and productive, and they are shown constructing a dam so that they can irrigate their crops (as opposed to dancing to a murderous song). It is to this village that the antagonist returns, following a stay in prison for setting fire to the forest and a re-education therein, to take up a life of farming. One of the closing scenes depicts him dancing happily with his new friends.

According to many authors, as well as the majority of Cypriots with whom I spoke, I could now end my description of the accepted history, confident that what I have described above is what had actually happened. A picture such as the one in Figure 1.11 could be presented with a caption describing how the forests the reader can see are a

[13] Livadhi, a village which was viewed by many of the government officials as being populated with the prime examples of the wild, ignorant, and fire starting villagers. More will be said about this village in the following chapters.

lasting tribute to the very successful and sustainable work of the British colonial policies and education/propaganda. Further, as Thirgood notes, since many of the British policies actually do seem to represent forward thinking -– selective felling, ecotourism, their description as the “people’s forest” – and their prescient standing is further supported by the fact that the 1950 forest policy was the primary policy until the mid 2000s, I could comfortably argue that the story of the rescuing of the island’s forests should be told to anyone working on issues of deforestation as a template to follow for success.

However, an inquisitive observer might desire a more detailed depiction of the island’s forest history. In the process of trying to find further information on the subject, that observer might note the lack of critical studies on the topic, and the continuous presence of a series of common stereotypes. Chapter 2 further investigates these issues.

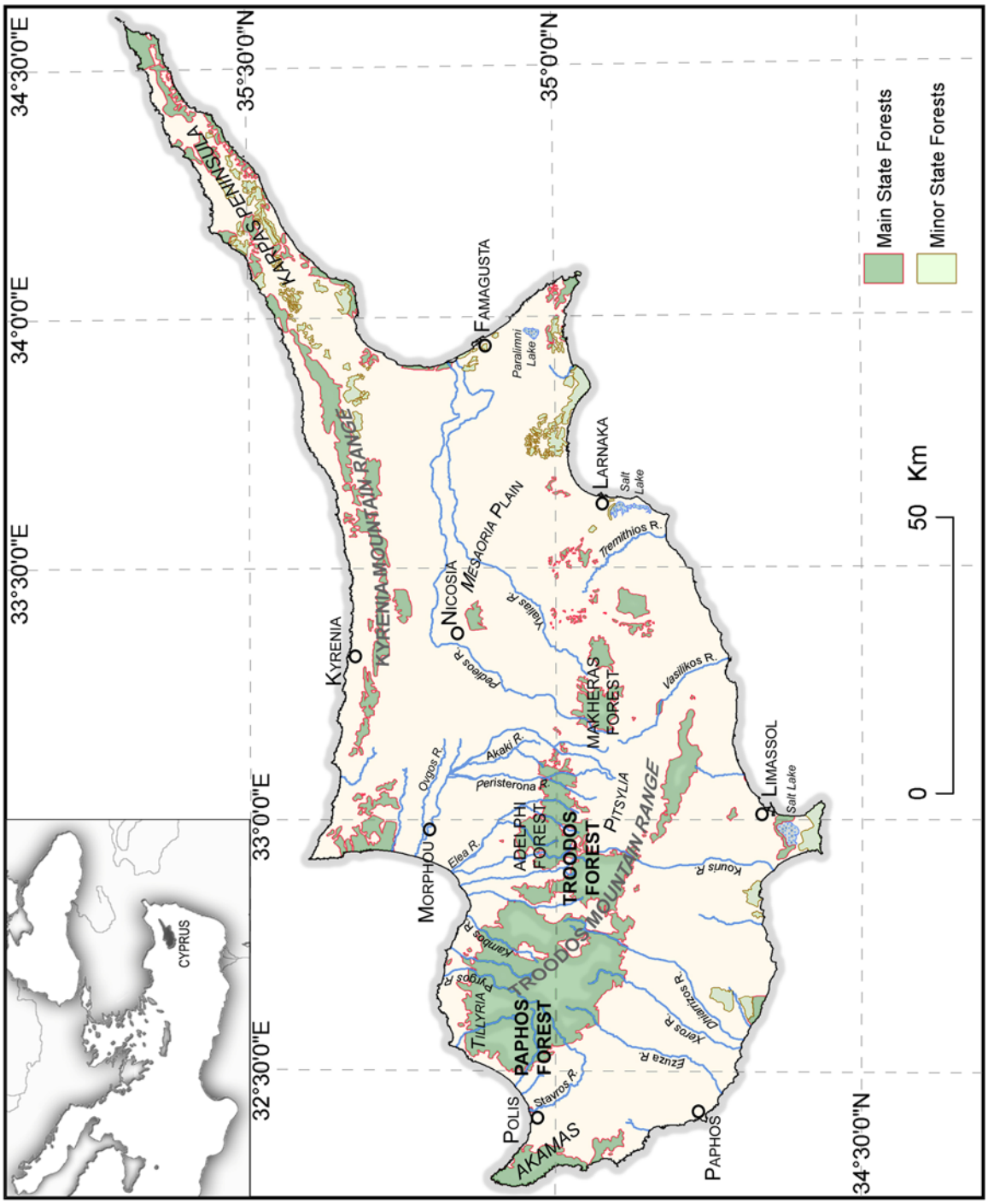

Figure 1.1. Overview Map of Cyprus

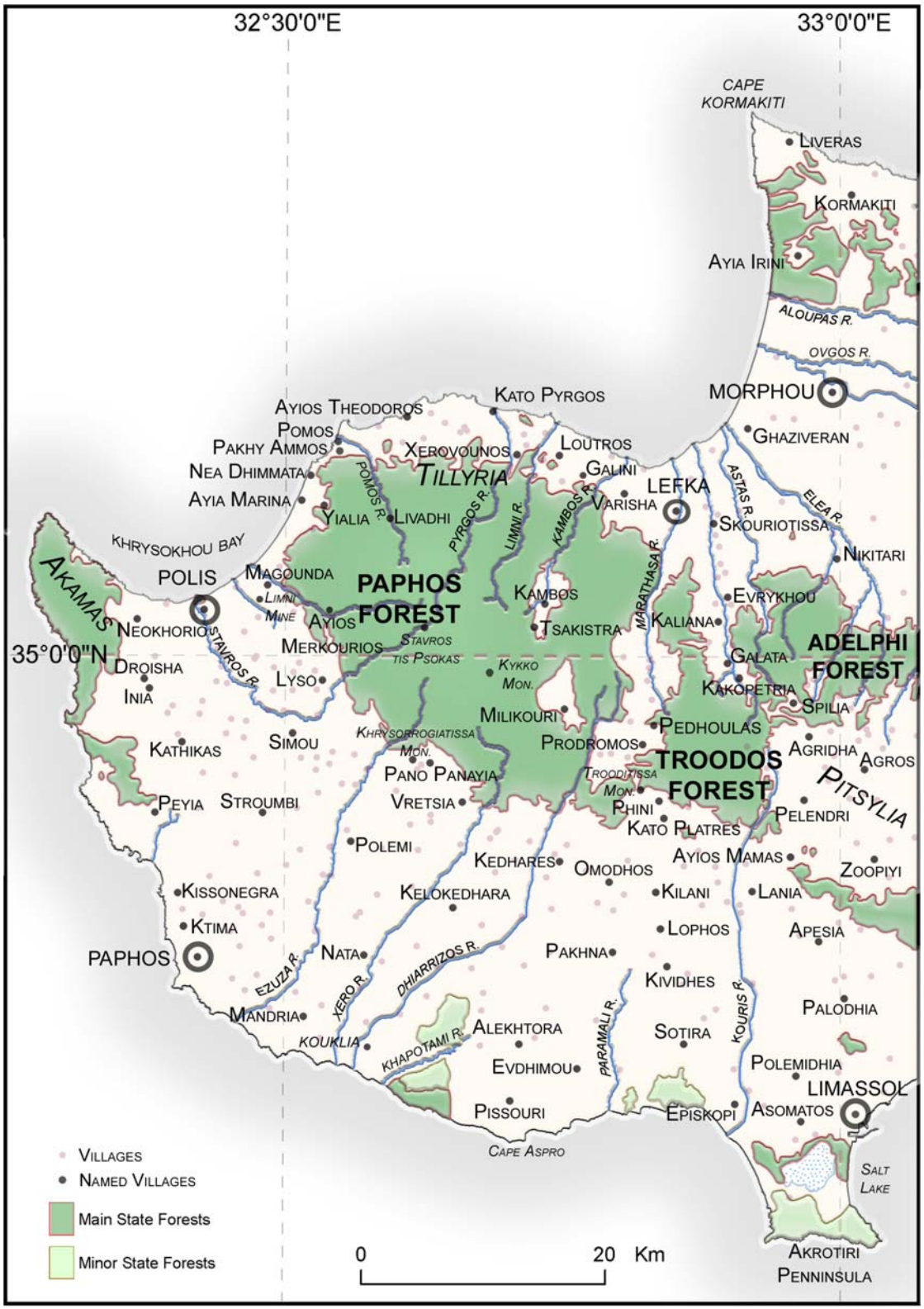

Figure 1.2. Cyprus Western Section

Figure 1.3. Cyprus Central Section

Figure 1.4. Cyprus Eastern Section

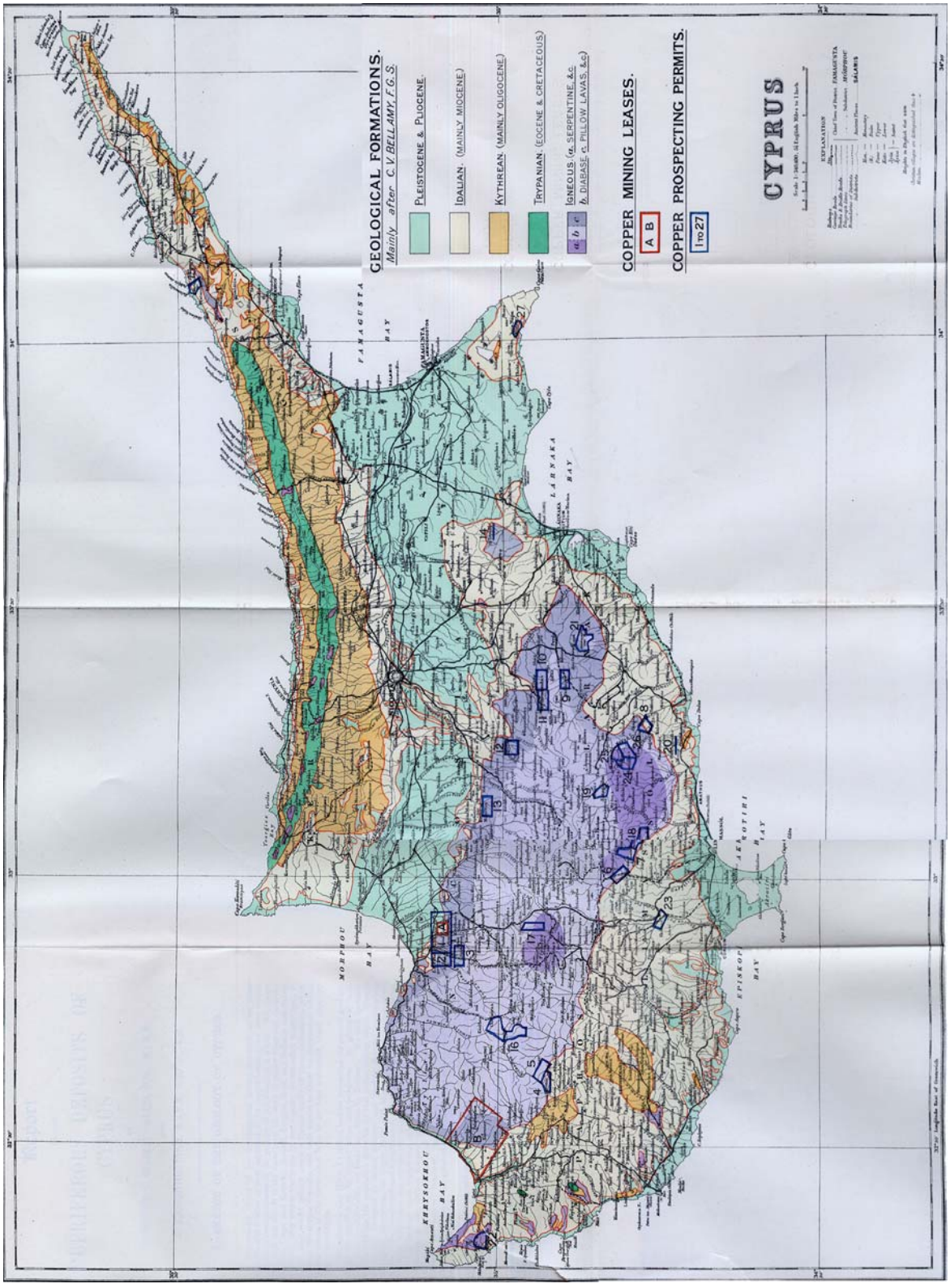

Figure 1.5. Geology and Mines Map of Cyprus 1938

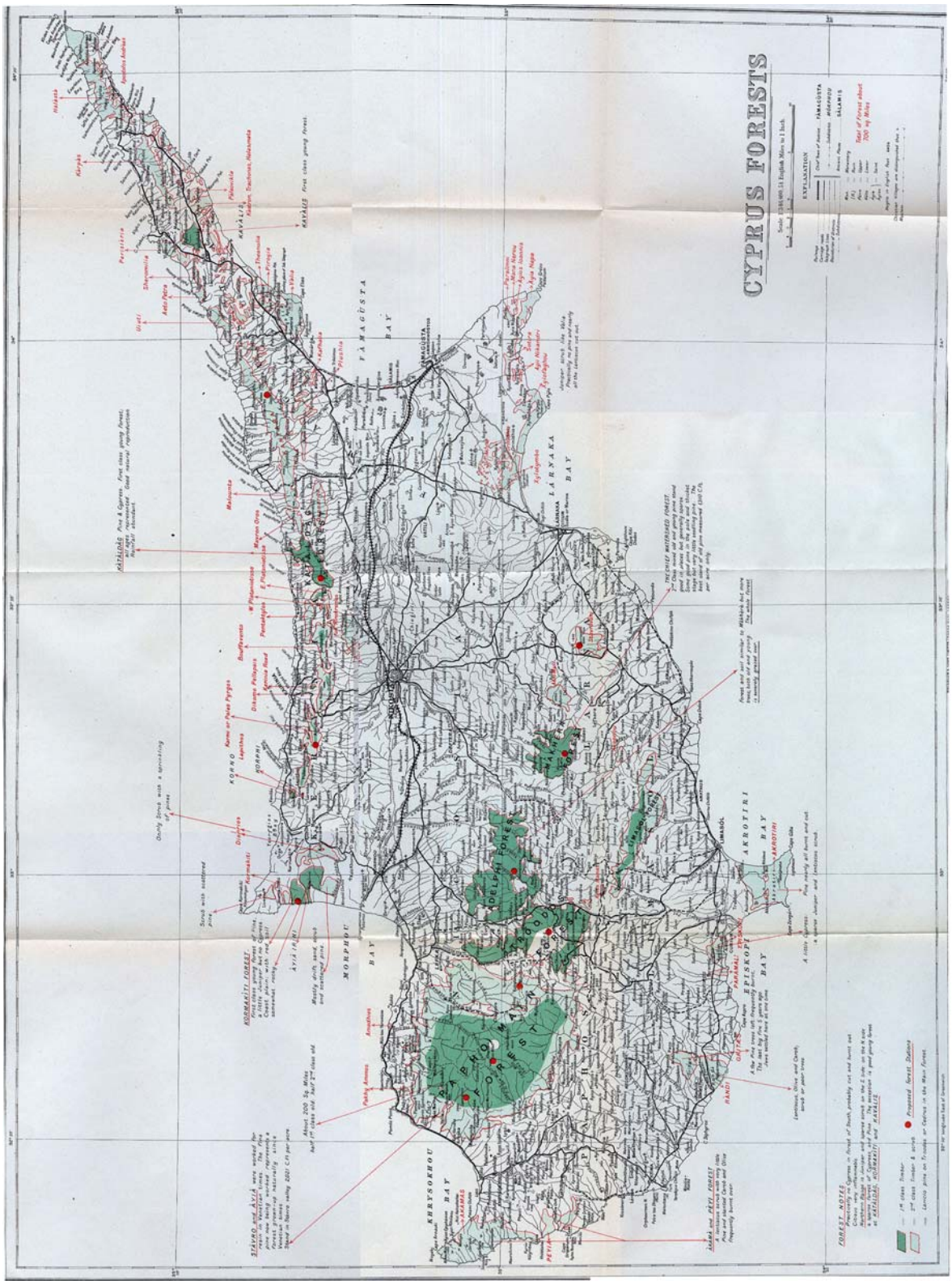

Figure 1.6. Hutchins Forest Map 1909

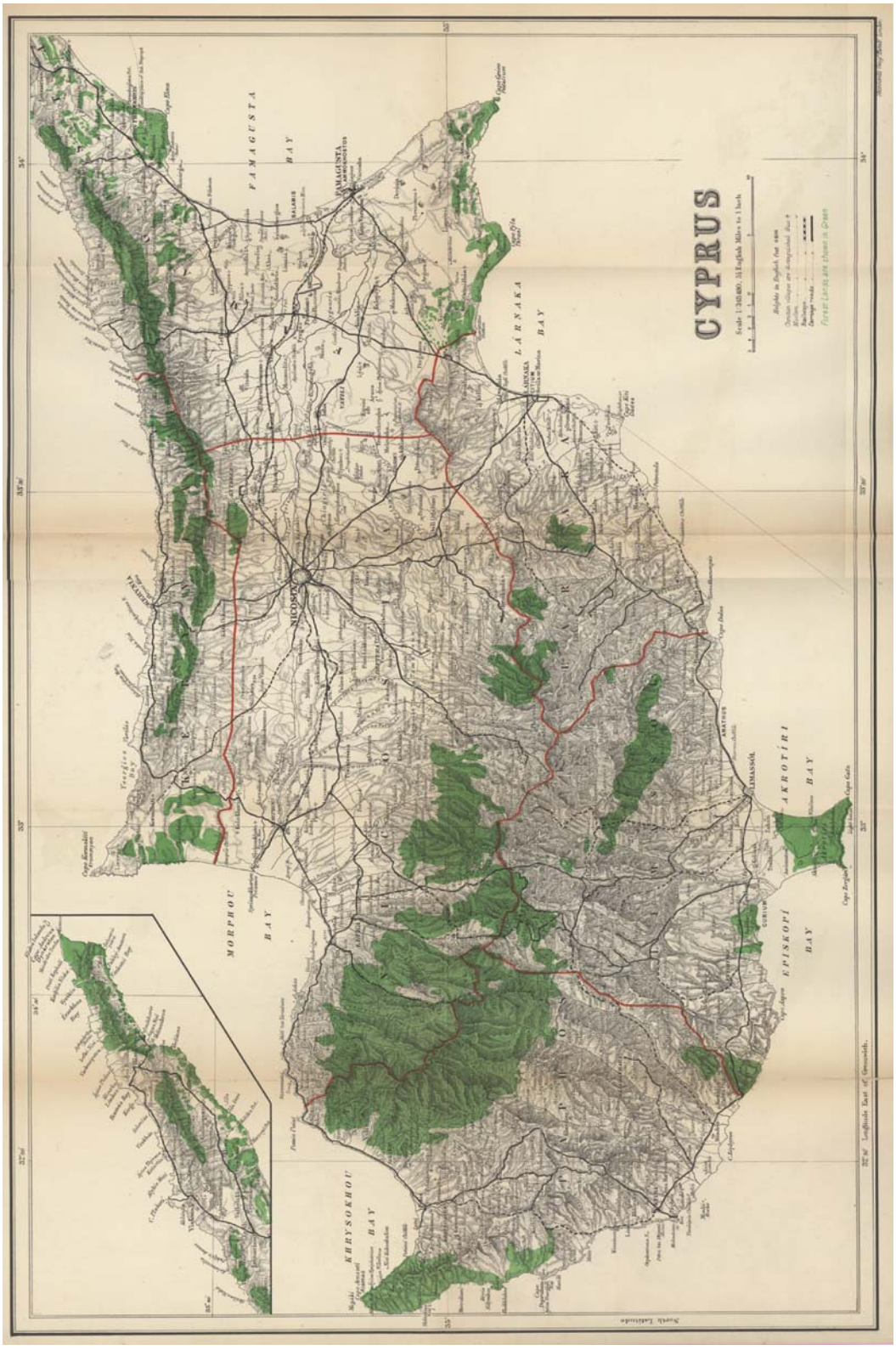

Figure 1.7. Forest Map of Cyprus 1913

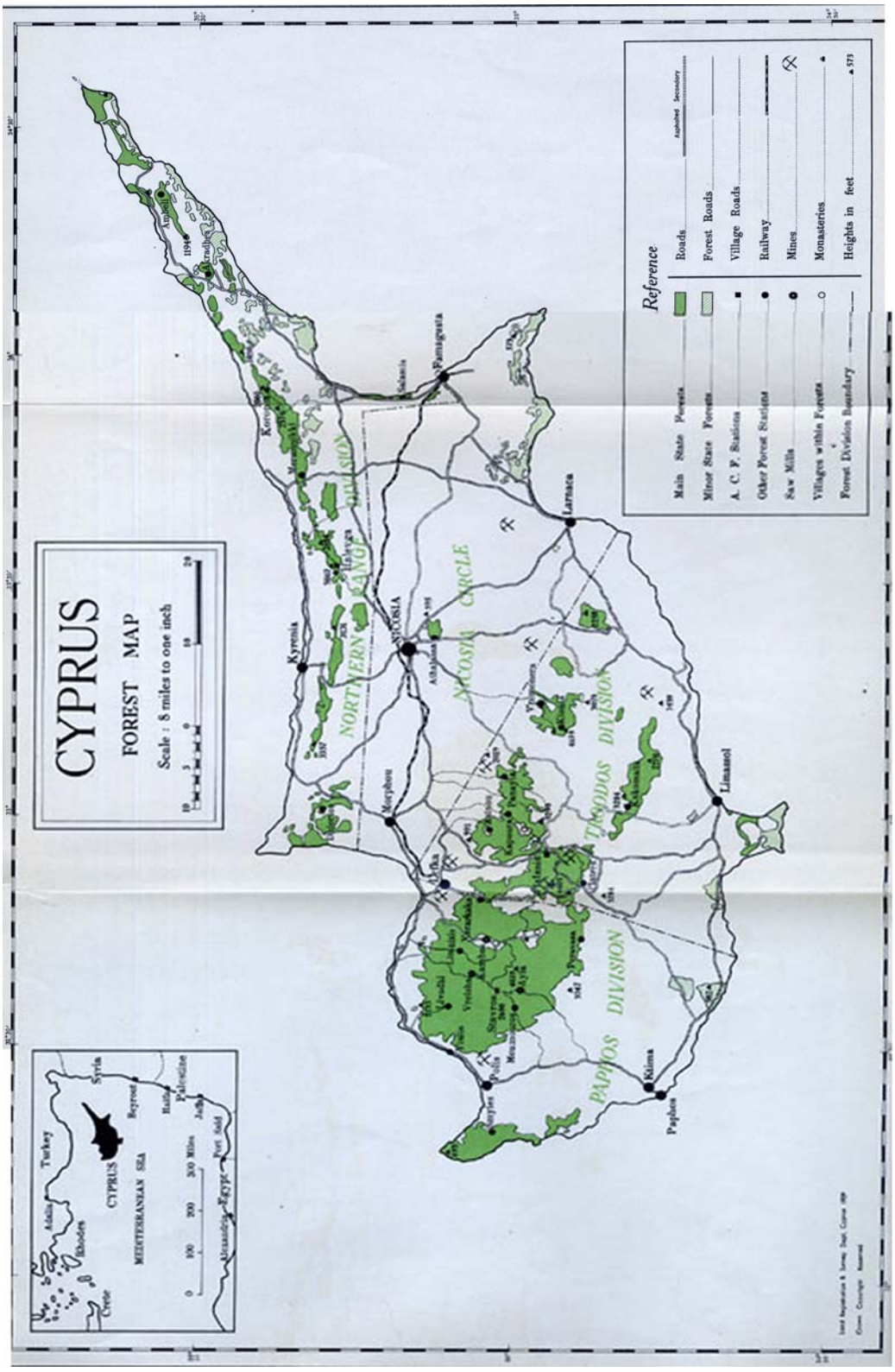

Figure 1.8. Forest Map of Cyprus 1938

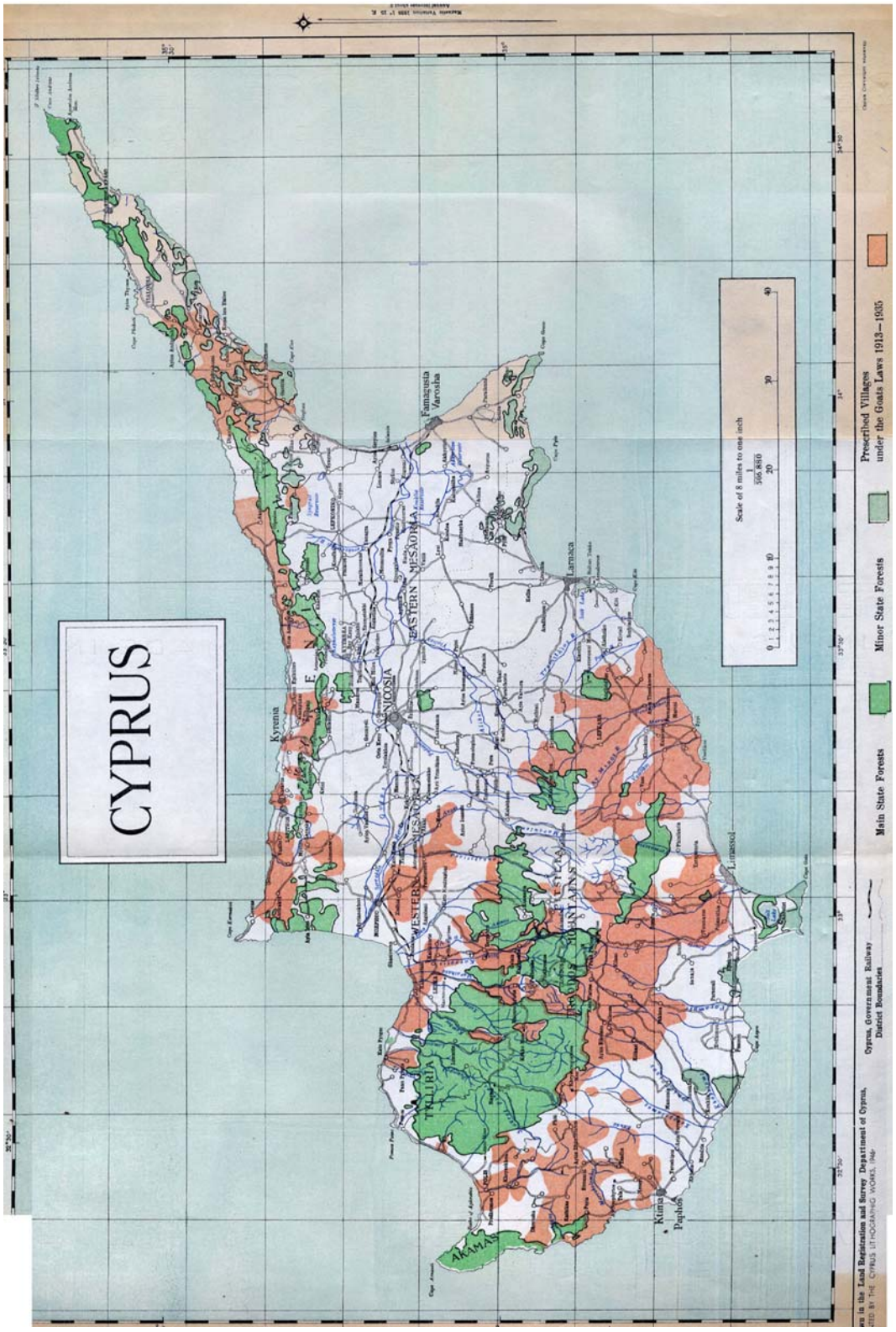

Figure 1.9. Forest Map of Cyprus with extent of Goats Law 1946

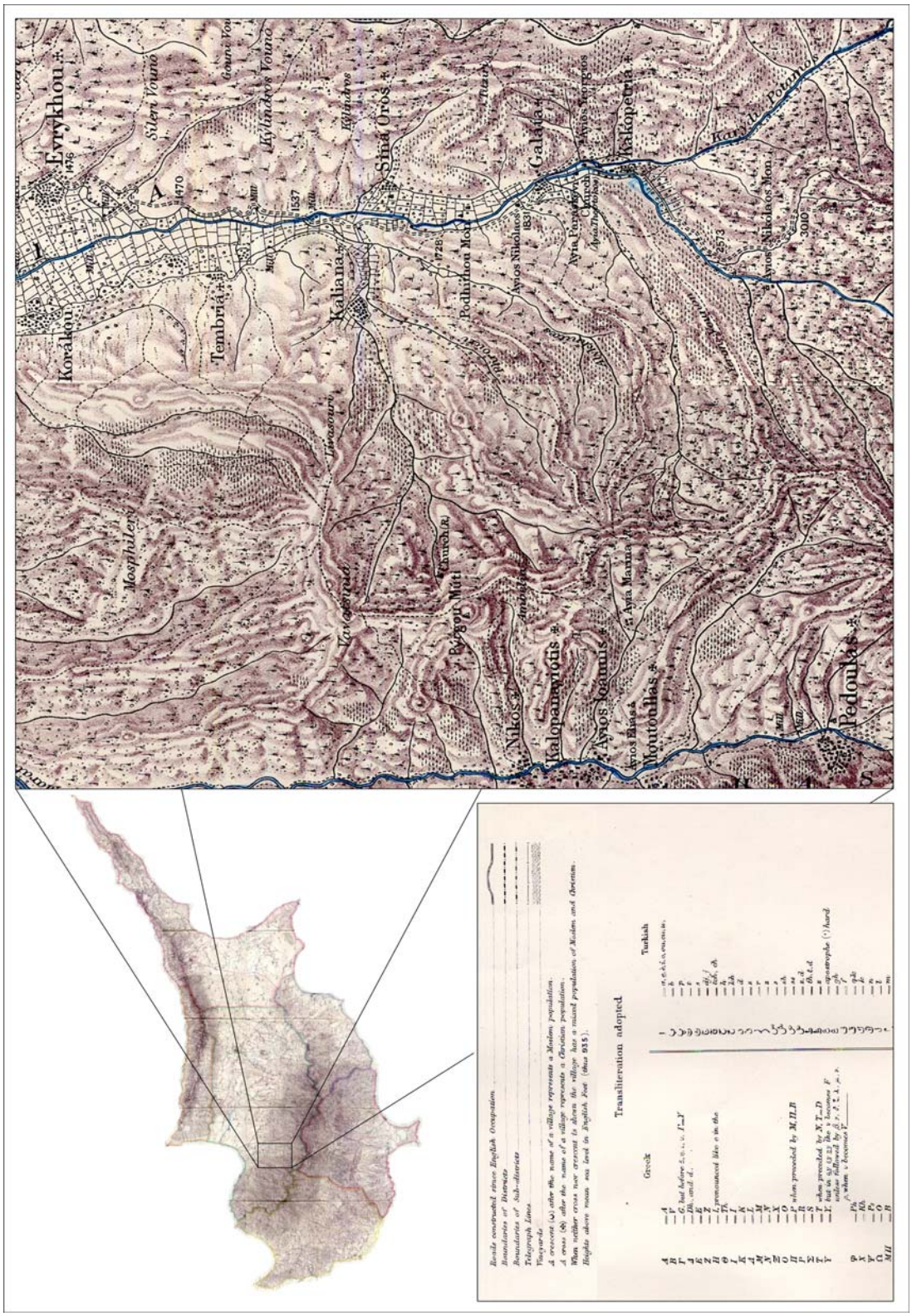

Figure 1.10. Kitchener Map of Cyprus 1882 (with detail)

Figure 1.11. Cyprus Forests Today (photo by author, 2004)

Chapter 2: Contextualizing the Accepted History

I have provided in the previous chapter an overview of the island's forests, land use and the accepted environmental history. In this chapter I will begin to further contextualize that accepted environmental history by situating my research within the general framework of colonial environmental history and by identifying and analyzing four interconnected themes present within the narrative. Variations of these main themes can be found in other colonial histories as well, and they therefore suggest common stereotypes (for example, see Godlewska 1995, Parmenter 1994). As the accepted environmental history on Cyprus has only very rarely been questioned[1], this contextualization will necessarily focus upon how scholars working in other areas have approached these stereotypes.

OVERVIEW OF COLONIAL ENVIRONMENTAL HISTORY

My research falls under the mantra of colonial environmental history, which, fueled by the increased interest in globalization and its effects on people and the environment, has become a popular topic in several different fields of study for its ability to illustrate the effects of an earlier far-reaching outside force and any continuing influences this history might have. The framework of this burgeoning topic has quickly moved forward from closely defined accounts of the biophysical environment into inquiries which strive to understand the role of human environment interactions across both physical and cultural grounds. Thus, environmental history scholars increasingly situate their work at

[1] Michaelidou and Decker (2003) represent one of the only recent examples of a questioning of the narrative, providing a postcolonial approach to resource conservation which focuses predominately on the present. As a possible explanation for this lack of critical studies, Bryant (2006) goes so far as to suggest that interests in postcolonial approaches have failed across all fields in Cyprus.

the intersections of a wide number of research strands, including imperial historiography, postmodern studies, postcolonial studies, subaltern studies, development and post development studies, political economy, cultural and political ecology, and environmental anthropology. This research is reminiscent of Braudel's *longue durée* study of the Mediterranean, with the key exception of the increasingly nuanced agency attributed to the environment[2]. The environment is not only the central, common strand, connecting these diverse topics (or perhaps more accurately, allowing the artificial departmental boundaries between the fields to be blurred), but it is also an active participant in each of these topics, both on its own standing as well as in its role as socially constructed by the inhabitants.

This recognition of the complexities of understanding human-environment interaction can be juxtaposed with a series of colonial environmental history studies that focus on the role of forestry within the colonial context (for example, see Guha 1983, 1990; Grove 1989, 1995; Sivaramakrishnan 1995, 1999; Rangarajan 1996; Saberwal 1999, 2000; Rangan 2000; Anker 2001; Rajan 2006; and much of Sivaramakrishnan and Cederlöf 2006). The choice of forests is not random for these authors; they were chosen both because of the commonality of their theme throughout the empire, as well as because of the simple fact that by the mid 19th century all of the colonial foresters were funneled through the same forestry education system – they all were indoctrinated within the same view of forestry science (see Rajan 2006: 3). Further, although several of the authors above purport to tackle the entire British Empire in their studies of forests, they all rely heavily on the Indian example. This is logical on account of the pivotal role the Indian forests played in the development of a British colonial strategy for forest

[2] Braudel's *The Mediterranean World in the Age of Philip II* (trans. 1972-73) explored the history of the region by focusing upon the long term political, economic, social, and geographic structures rather than specific events, such as battles, which he viewed to be largely insignificant. His primary actor was the sea itself, presented as constant and unchanging and yet exerting primary power over all events. As noted above, this environmentally determinist aspect of his work was subsequently criticized.

management, but at the same time it can lull one into blithely accepting that the Indian example was typical of all colonies.

The interest of these authors in the forest history is almost universally driven by their recognition of the role that the framework of environmental management installed by the colonial forces continues to play in present policy formation. As Sivaramakrishnan (1999) states, after arguing that the combination of conservation thinking and the civilizing desires of the colonial state enabled scientific forestry to emerge as a development regime which would transform postcolonial forestry, "…we have to create the fabric of future policy from the threads of past experience. But we must weave those threads from the past with care" (283). Put more directly, Rajan (2006) notes that "historical investigations into the agendas of colonial scientific environmentalist institutions are of practical relevance to governments, policy makers, and activists" (2). Further, several of these authors have gone on to write works specifically devoted to discussions of postcolonial development based upon their understanding of it via their knowledge of colonial history (for example, Sivaramakrishnan and Agrawal 2003).

While these authors do not deny the complexity of the native experience during the colonial period, their interests are most often centered on unpacking the motivations and influences of the colonial actors. The research plea presented by Rajan below is a common one in this setting.

> [T]he domain of imperial forestry was as stratified as it was homogenous. While there were indeed, generally speaking, broad imperial priorities; there was, at the same time, a constant tug-of-war among professional communities. The picture created by the ideal-type 'state forestry' used by most environmental historians today therefore needs to be expanded, taking cognizance of the perpetual contests over policy and perspective within the colonial state and within the empire-wide forestry community (2006: 158).

Within this context, Grove (1989, 1993, 1995, 1997, 2002) is hailed as being one of the pioneer authors. In an argument most fully detailed in his massive 1995 work, Grove

suggests that although much imperial history has assumed that "the colonial experience was not only highly destructive in environmental terms but that its very destructiveness had its roots in ideologically imperialist attitudes towards the environment" (1995:6), this is not completely true. "[I]t has become increasingly clear that there is a need to question the more monolithic theories of ecological imperialism, which seem to have arisen in part out of a misunderstanding of the essentially heterogeneous and ambivalent nature of the workings of the early colonial state" (1995:7). For Grove, this questioning of the workings of the state led him to argue that the early colonial scientists working in the periphery, influenced by ideas of social reform as well as strong concerns with the link between forests and climate, were in fact the first environmentalists. Although the colonial state may have used conservationist policies for their own economic development, the roots of these policies did not lay in such exploitative thinking nor did they at the center, but rather in the actions of those environmentalist scientists in the periphery.

Later authors have criticized Grove for a number of reasons, especially as being too sympathetic to the colonial actors and placing too much importance on the periphery while misrepresenting that of the home offices. As a key example, Drayton (2000) argues that environmental scientists provided the justification for state exploitation – conservationism did not come about because of the unique situations presented by colonialism, but rather colonialism came about because of the arguments of conservationism. No universally agreed upon consensus has emerged from these works regarding the motivations of the colonial scientists (and I would argue that we should not expect to find one). Rather, the still growing legacy of Grove's work has been that it has forced us to remove the colonial scientists and the colonial enterprise from their black boxes, and directly tackle some of the dominant debates and concerns within the fields upon which colonial environmental history draws.

The dominant debates and concerns to be traced cover a wide range of topics. For example, drawing upon themes represented within Said (1978) and Bhabha (1984), how does one find the middle ground in the process of interpreting colonial history so that the roles of the colonizer and colonized is not over-essentialized, but at the same time, the real division between colonizer and colonized is not forgotten? How does one give a voice to the voiceless, without overriding it with one's own voice? How does one define resistance and what is the role of tradition within this setting? What is the role of the environment in shaping the imperial legacy? What role did scientific forestry concerns play in colonialism? Where did these trends emerge? Why and when? Can one accurately view the environment (including its exploitative commodities) as driving imperialism? Did an Eden complex drive the process? Or did the concern with environment come about because of colonialism? What role do colonial environmental policies continue to play in modern development? Are these modern development programs worthy of the same criticism as the colonial ones?

COMMON THEMES PRESENT WITHIN THE ACCEPTED HISTORY

My research shares many of these concerns and questions as it attempts to better understand the Cypriot environment by cross-cutting multiple research fields. The necessity of this cross-cutting will become increasingly evident in the below analysis of the four main themes which have served the dual role of both guiding the accepted environmental history of Cyprus as well as guaranteeing its continued existence. Specifically, these interconnected themes focus upon (1) the role of previous ruling powers in the context of environmental degradation, (2) the beneficial role forests will play on the environment, (3) the negative effects of the goat and the shepherd, and (4) the "ignorant" native in need of patriarchal care.

Previous Rulers and Environmental Degradation

It has already been stated that Cyprus has a long history with many different foreign rulers. While varying in the extent of their mismanagement, the accepted history presents the British colonial rule as being the first to actively work toward protecting the forests, as opposed to either ignoring or destroying them. Upon inspection, there are actually two interrelated issues at work within this theme: 1) the assumption that the Eastern Mediterranean was at one point in time densely forested and why that assumption exists and 2) the possible political and cultural motives, apart from any environmental issues, behind presenting the previous rulers as having been poor rulers.

Turning to the first issue, as Blumler states, "It is almost universally accepted that [the Near East has been backward and poverty stricken as] a consequence of the prolonged history of use and overuse that the Near East and Mediterranean region have suffered, which is assumed to have seriously degraded the land" (1998: 215-217). However, an increasing number of scholars (including Blumler) have begun to question this degradation narrative. Horden and Purcell, in their massive 2000 work, provide a litany of complaints about deforestation arguments which they feel should now be familiar. These include "misuse of anecdotal evidence, unconsidered analogy from modern times to the past, Romanticism, progressivist and evolutionist *parti-pris*, cultural prejudice in favour of agriculture, failure to see the weakness of interregional generalization in the Mediterranean, and above all an assumption of human helplessness in the face of environmental determinism" that obscures the human actions actually occurring (2000:337).

Grove and Rackham (2001), drawing upon work by Rackham (1982) and Rackham and Moody (1996) argue that the common presentation of the Mediterranean as having

been progressively degraded over the centuries is a myth that they label the "Ruined Landscape" myth. This Ruined Landscape, or Lost Eden, narrative was created out of four main strands, or influences, which came together over the 17th and 18th centuries[3]. As Grove and Rackham posit, the western European travelers often journeying during the dry summer season created it to explain the disconnect between what they saw in the Mediterranean and what they expected to see. Drawing upon their often uncritical readings of the classical sources and their preconceived notions that the Mediterranean lands should look green, lush, and much like a northern landscape (thanks to landscape paintings such as by Nicolas Poussin [1594-1665], Grove and Rackham's first strand), they attributed the drier, browner, and less lush landscape with degradation. Multiple travelers following them would think the same thing – that the scrub covered hills and woodlands with widely spaced stands of trees represented a landscape of degradation which must have been allowed to happen by the previous poor management, rather than a natural landscape.

Throughout their 2001 work, Grove and Rackham repeatedly question modern interpretations of degradation and desertification in order to illustrate that the Ruined Landscape myth is just that, a myth. Although they can be faulted for at times falling into some of the same issues that they illustrate in the Ruined Landscape myth, especially a tendency to over-generalize (see Grove and Rackham 2001:11), nonetheless, their primary concern with recognizing how a commonly accepted environmental narrative was formed and whether it has any factual basis is well-heeded. Butzer (2005, 2006) and Butzer and Harris (2007) have continued along this line of questioning over generalized statements regarding the Mediterranean environment.

[3] "It is full-grown in the writings of Sonnini, the French traveler of 1777-8, especially about Cyprus, which became the type example of Ruined Landscape" (Grove and Rackham 2001: 9).

Moreover, as an illustration of the universality of this theme, this problem associated with the role of perception in interpreting degradation is not just limited to the Mediterranean, nor is it limited to centuries-old myths. A modern example in Western Africa has been uncovered by two cultural anthropologists, although in this myth, with the absence of a former ruling power to blame, the natives themselves are blamed for the perceived degradation. Fairhead and Leach (1996: 105-121) and Leach and Fairhead (2000) have illustrated how what an outsider defines as the "natural" state of an environment is largely dependent upon what type of vegetation is present when the outsider initially surveys the land. More specifically, through "the agro-ecological knowledge and experience of local inhabitants" (1996: 105), they outline the inaccuracies in the pervasive deforestation narrative concerning Guinée's forest-savanna mosaic. Colonial authorities assumed that the forest patches they saw were representative of a landscape which had consisted of a continuous forest cover before being degraded by the local inhabitants. However, investigation by Fairhead and Leach and others have shown that over the past forty to fifty years the areas of forest and savanna vegetation have remained stable, and where there are changes, they usually are because of increased, not decreased, forest in the area. Further, by talking with the native inhabitants, Fairhead and Leach (1996) find that "forest islands are far from the relics of a disappearing 'nature'; instead they are strongly associated with settlement, existing because of it and its everyday activities" (109). The authors suggest that the presence of "intellectual, social, political and financial structures" (118) including the "deduction of long-term change from snapshot or short-term observations" (114), scientific paradigms which hold that there should be a climatic climax vegetation[4], and "racial, pejorative views of African farming and forestry practices" (114) have aided in the persistence of this narrative.

[4] This will be further discussed below.

To briefly summarize, therefore, recent scholarship has questioned depictions of degradation both in the Mediterranean and elsewhere. These examples illustrate an increasingly recognized aspect of discussions of environmental history – that a description of "degradation" is often a highly subjective thing and that separating natural from human-influenced can be quite difficult. As Beinart and Coates (1995) note, "Concepts of nature are always cultural statements" (3) and

> Distinguishing degradation, especially long-term, from change or transformation - less emotive terms - is rarely easy. The natural world has such a deep and elaborate human imprint that we must confront the awkward reality that we may search in vain for a recognizable and definable state of nature (3).

Blaikie (2001) also struggles with some of the implications of the subjectivity of understanding environmental change when he asks how range ecologists and pastoralists can construct two different readings for the environmental state of South Africa.

> Is it because there are 'real' and objectively verifiable changes in the state of nature, such that the rate and direction of environmental change increasingly threatens humankind? Is it simply that the optic through which we view nature has changed? Or is it possibly the case that the politics of who holds the looking-glass has shifted, privileging some views over others? (2001: 134).

Blaikie suggests that all of these options are valid, and indeed, often coexist. This recognition complicates any broad sweeping regional statements either for or against degradation and clearly illustrates the need for an approach that starts from the local level.

Apart from these issues surrounding the narrative of land degradation, there is the question of the other politico-cultural reasons behind portraying previous rulers as poor managers. In the Cypriot narrative, the Ottomans are singled out for special blame. This is a common presentation of environmental history in the majority of areas which had been part of the Ottoman Empire. As above, this view of negative Ottoman effects are questioned by some, such as Meiggs (1982) who notes for Greece that "It is a widely held view that the main responsibility for the deterioration of Greek forests rests with the

Turks, but the figures suggest that much more has been lost since the establishment of Greek independence" (392). However, it is just as common to see the narrative repeated unquestioningly as it is to see a statement such as Meiggs (see Thirgood 1981, 1987 for the general Mediterannean and Cyprus).

The reasons behind the creation and acceptance of this narrative can be traced at least partially back to political and cultural concerns. There are clear advantages for western authors, especially British authors, to have constructed a history containing this as a primary theme, as by doing so, it places the West in the position of "saviors" and the East in the position of "destroyers", building upon a East/West dichotomy that can be traced back over the millennia. Further, the current political situation on Cyprus that has resulted in a divided island largely serves to encourage the emphasis of this idea of Ottoman degradation. Thus, it must be recognized that factors completely separate from the environment itself can play key roles when environmental histories are being created; and further that even with an emphasis on the environment degradation is often in the eye of the beholder.

The Effect of Forests on the Environment

The second theme concerns the beneficial role forests are perceived to have on the climate, such as lower temperatures, increased rainfall, and decreased erosion. As noted in the accepted history, the colonial officials, especially the foresters, used these beneficial properties of forests as support to increase interest in their protection. On Cyprus, where drought was a valid concern, the perceived role of forests in making and storing rainfall took center stage. "In proportion as these forests disappear … so will the climate of Cyprus deteriorate and its water supply diminish" (SA1/2265/1885). However, other benefits of forests were also recognized, including their ability to prevent erosion

on slopes (Madon 1930 [1880, 1881]) and even the idea that deforestation was the cause behind Cyprus' excessive number of locusts (Biddulph 1889: 711). Further, the indirect benefits of nature on the human psyche, such as discussed by Wordsworth and Thoreau in the 19th century who were themselves building upon earlier works, are not dismissed on Cyprus; they do reemerge from time to time, as in the following 1999 statement by Michaelides (a former Director of the Forest Department) contained within a FAO funded project. He states that if foresters are posted in towns, rather than forests "[T]hey will not also have the chance to be subjected to forest influences for creation of new and original thoughts and ideas …" (90).

This theme directly dovetails with the first theme, especially as one could only make an argument for past poor management and degradation based upon deforestation if one believed that forests did play an important role in the environment. In fact, the final three strands through which Grove and Rackham (2001) trace the development of the "Ruined Landscape" myth all center on the role of forests on climate. They credit Giuseppe Paulini's report on the Venetian Alps in 1608 with starting the idea that floods are abnormal, and that only forests can prevent them. They then turn to the plant physiologists J. Woodward (1699) and S. Hales (1727) for their third strand. Both of these men measured large quantities of water vapor released into the atmosphere by plants and trees, and therefore posited that trees served to increase rainfall by adding the observed moisture to the atmosphere and that, by corollary, destroying the trees would decrease the rainfall. Their final and fourth strand is found in the observations of colonial officials on the effects of people, goats, and pigs on remote tropical islands where colonial scientists associated degradation with deforestation (Grove and Rackham 2001: 9-14)[5].

[5] Grove (1995), the son of the Ruined Landscape Grove, is the recognized primary source on this, as noted previously. He argues that it was on Mauritius, "under the influence of zealous French anti-capitalist physiocrat reformers and their successors between 1768 and 1810", that some of the "earliest experiments

To summarize, the concern in the Cypriot narrative about the environmental effects of forests and in turn actions taken to protect them reflects a common environmental worry throughout the colonial world. It is undeniable that by the mid 19th century these ideas about the link between forests and climate were widely disseminated, as can be seen in the publication of works such as Marsh's *Man and Nature* in 1864, perhaps one of the best known books arguing from such a stance. As noted above, this popular view of interconnections provided foresters with the opportunity to construct a crisis narrative of general degradation and desolation following the removal of forests, and the information also provided colonial officials with a strong economic argument for protecting natural resources for their indirect, as well as direct, benefits. "I have already … recommended the question of Forest Conservation ….I feel that it is only right that I should again press the subject … as one of great and growing importance, and in which in many cases the

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in systematic forest conservation, water-pollution control and fisheries protection" were conducted in the context of a fear of the climatic consequences of deforestation and species extinctions and an awareness of the possible global impact of economic activity (1995: 9). "Tree planting, forest protection, climate preservation and agricultural improvement were all seen as essential components of radical social reform and political reconstruction" (1995: 10).

At the same time as the events above were occurring on Mauritius, British scientists associated with the recently founded society of Arts were also investigating climatic and desiccationist theories. By 1764 forest protection programs were being carried out in the Caribbean. Although the British reforms were not as closely connected to agendas for social reform, they nonetheless "were sufficiently radical in concept and alarmist in implication to come to the notice of the English East India Company", and soon a forest protection program was present on St. Helena (1995: 10). The forest protection programs on both St. Helena and Mauritius appeared to be successful, and these islands "eventually provided much of the justification and many of the practical models for the early forest-planting and conservancy systems which developed in India and elsewhere after the early 1830s" (1995: 10).

By the mid 1800s, colonial conservatism was characterized by a "highly heterogeneous mixture" of ideologies, a mixture which had been formed at the peripheries of the empire by local government scientists influenced by indigenous systems of knowledge, the ideology of a tropical Eden and the Orientalist aspects of it as an "other" (1995: 11). By playing off of the insecurity of the colonial state regarding its survival, influenced by the connection between the degradation of an island's environment as a result of plantation agriculture, the concern of "a connection between climatic 'virtue' and social or political virtue" (1995: 478), and the return of a desiccation argument, "the new scientific interest group…was able to exercise political leverage unheard of in metropolitan Europe" (1995: 477). "Colonial environmental policies, arose, therefore, between 1650 and 1850, as a product of highly structured tensions between colonial periphery and metropolitan centre and between the insecure colonial state and the climatic environmentalism of the new scientific conservation elites" (1995: 485).

health and prosperity of the Colonies is very deeply concerned." (Extract from 1880 Circular sent to all of the British Colonies, SA1/2117).

The effect of forests on climate is still a matter of concern today, and as Grove (1997) notes, this debate regarding the extent of forest effects is becoming stronger in the current framework of increased climatic fears. Despite its popularity, even in the past there was not a complete consensus on the degree of effects that forests may have. For example, Huntington (1911: 264-268) suggested that there was not a clear link between forests and increased rainfall while in more modern times, Grove and Rackham (2001) and Nicholson, Tucker, and Ba (1998) suggest that the linkages may be overstated between the two, although they certainly do not deny that some connection exists. Other authors, such as Saberwal (1999) argue that the perceived effects of forests on rainfall and soil stability in India represent solely a politico-cultural framework with little or no empirical evidence. This ongoing discussion concerning interlinkages points to various climatic responses depending upon the specific geographic setting, which in turn argues for much care to be employed when creating cause and effect statements concerning the environmental role of forests.

Goats, Shepherds, and Fires

The third theme concerns the perceived negative behavior of goats and shepherds in relation to the forests. The view of the first Principal Forest Officer (PFO) of Cyprus, Madon (1930 [1880, 1881]) that "every burst of vegetation is arrested under the unceasing action of its [the goat's] cruel teeth, of its poisonous saliva!", finds support in other writing from the general time period (e.g. French reports from their Department des Eaux et Forêts). It was seen as mandatory world wide to remove goats from forests, and that was especially true in the mountain forests of Cyprus. As Biddulph (1889:710) notes,

"Cyprus is overrun by goats, which are the greatest enemies to forests in every country where they exist". In fact, the Cypriot goat became quite famous around the empire for several decades[6].

These authors were not unique in their concerns about the "poisonous saliva" of goats, as the idea was close to two millennia old by that time. Virgil (*Georgics,* Book II, lines 376-379) notes that the flocks, with their poisonous teeth, kill the plants, leaving death in the scar their bite leaves on the stem. Many centuries later, Dante also picks up this topic in a description which commentators suggest refers to a he-goat with poisonous teeth, or minimally to the idea that grass does not grow near the goat (*Inferno*, lines 71-72; Carlyle 1867, Musa 1996).

As with the first stereotype, this theme of the destructive aspects of goat grazing rests upon a number of interrelated issues. Complaints about grazing typically center both upon the damage the actual act of grazing causes to the landscape, as well as the damage caused by shepherds in attempts to improve forage or protest rules. Turning first to the effect of grazing itself, in order to understand why grazing has so often been seen to have a detrimental effect on the landscape, one must also look into the literature surrounding the ideas of climax communities and succession.

An equilibrium view of vegetative succession, often linked with Clements, is still popular among some today. This view holds that there is a regular, predictable, and quantifiable sequence of changes through which a vegetative community should progress over time. The final goal of the sequence is to reach the appropriate climax community for that particular area. Thus, if left undisturbed (or alternatively, properly managed), the vegetation in an area which is theorized to have a climax community of trees would undergo the following series of predictable changes: Annual grasses will turn into

[6] See Unwin (1928) for one of the strongest diatribes against them. The mountain forests of Cyprus were the domain of goats, but not sheep, who could not thrive in that setting.

herbaceous perennials, those perennials will then convert to shrubs, and the shrubs into progressively increasing sizes of trees. As the argument is presented, by their grazing and especially their tendency to eat woody vegetation, goats disturb this sequence of events in areas which should be forested, preventing the area from reaching its climax community, or in other words, the natural state in which it is thought it should be.

However, most scholars have begun to question the idea of equilibrium and Clementsian succession. Blumler, in articles from 1993, 1996, 1998, and 2002, provides strong examples of this questioning within the context of Mediterranean and Near Eastern environments. As discussed in the first stereotype, Blumler notes that arguments about degradation are subjective and traces the ideas about climax succession back into Enlightenment and Romanticism thinking, hypothesizing that its creation as a bio-utopian concept is what makes it appealing to so many (1998). More specifically,

> The climax concept derived in part from the Romantic notion of the forest primeval, which in turn was a reworking of the Edenic myth; that is, Clements effectively combined the Edenic myth with the Enlightenment ideal of progress, and situated them in nature. No wonder environmentalists and others who romanticize nature continue to embrace his ideas so wholeheartedly … even as ecologists abandon the paradigm as contrary data accumulate….Ecologists now recognize that the notion of a final stable condition is dubious, and consequently usually enclose 'climax' with quotation marks (2002: 523).

Further, "Traditional views regarding successional relationships in the Mediterranean/Near East summer-dry regions are not in accord with ecological theory or with empirical evidence, and interpretation of human impacts on the landscape are often simplistic" (1993: 287).

> It may be that …the traditional models of successional sequences in summer-dry regions are topsy-turvy with respect to reality. In particular, annual plants can be important under all disturbance regimes and can even comprise 'climax' vegetation if seasonal drought is severe. Hence, human impacts on vegetation, and perhaps also on soils, have been more complicated and less negative than generally assumed (1993: 289).

Blumler is not alone in his questioning of classic succession models. For example, Rackham (1982) questions the superiority of climax vegetation by noting that following a pre-Classical deforestation in Greece, "the varied shrubs and undershrubs well may be of more use than the original trees and meager herbs would have been" (1982:195). Naveh (1995), building upon his prior work in the Mediterranean, also questions aspects of the classical succession-to-climax model, noting that for pine and oak forests, "contrary to preconceived climax theories, noninterference" is a curse, rather than a blessing (1995:490). Fairhead and Leach (1996) represent a non-Mediterranean example, emphasizing the idea of a disequilibrium theory of ecology and the recognition that disturbance is natural and not necessarily a source of degradation.

The fact that succession theories are questioned today, however, does not fully address the question of the actual destructiveness of the goat grazing on vegetation. While as shown above the accepted history adopted the view that grazing was highly destructive, these "poisonous" qualities of goats are no longer so widely believed nor were they necessarily unanimously believed in the past. Meiggs (1982) provides examples to show that goats were often viewed positively within the classical period, while in more modern periods, numerous authors (see Blumler 1998; Brower and Dennis 1998; Butzer 1988, 1996; Bernáldez 1995; Vassberg 1984, 1996; and Bar-Yosef and Khazanov 1992 for examples) have illustrated that grazing is not necessarily an anathema to vegetation growth, and that in the correct situations the two can coincide well. The fact that transhumance can be part of a successful polyculture subsistence pattern is seen in its long-term history of existence in many areas of the Mediterranean and Near East, as well as the history of land-use laws allowing for it.

Rackham and Moody (1996), echoing Pococke (1745), have even suggested that goats are naturally the best suited inhabitants for mountainous Mediterranean regions. They discuss grazing on Crete, noting that "…we do not endorse the blame heaped upon

shepherds and goatherds and their flocks; grazing and occupational burning are essential to maintain the Cretan landscape. The recent increase of trees and grazing-sensitive plants is sufficient evidence that they are not, in general, carried to excess" (1996: 210). Grove and Rackham (2001: 269) echo these ideas, stating that overgrazing can and does occur, but the level of degradation it causes is highly dependent upon the area and the length of time the area was overgrazed. They further stress the importance of local knowledge, noting that shepherds often know best how to manage the landscape, but their management plans are frequently thwarted by government administrators encouraging the management styles in vogue at the time (for the past century, private land, fencing, and a reduction in transhumance).

To provide an example from outside the Mediterranean, Dodd (1994) provides a similar case study for sub-Saharan Africa. "I found no scientific evidence that nomadic or even commercial use of domestic livestock causes irreversible changes in range vegetation away from watering points and habitations" (32). He concludes by looking at the implications for development this study of paradigms and evidence has produced, noting that we do not understand much of what is occurring, and "long-term research needs to be done on extensively used rangelands to understand the interactive effects of grazing, weather, and fire or fire suppression" (32), and emphasizing that rangeland livestock production, if carried out properly, is the best sustainable land-based food production scheme for sub-Saharan Africa (33). Much as with Grove and Rackham (2001), Beinart and Stocking add to this view of African ecology by noting that although overgrazing certainly can cause erosion, there is not a directly proportional relationship between goats, or any livestock, and erosion when grazing is practiced responsibly (Beinart 1996:54-72 and Stocking 1996:140-154).

However, it is not just the goats, their perceived "poisonous" saliva, and their erosion inducing eating habits and hooves which are viewed negatively within the accepted

history; it is also the fires that the ignorant shepherds are said to have set to either create more grazing land for their goats, or to express revenge at the forestry policies. A recent expression of this idea in modern literature follows: “But it was mandatory to break the unholy alliance between fire and goats. Nothing so symbolized Cypriot insolence and British exasperation as the persistence of semiferal goat herds, and of course the fires that traced their migrations” (Pyne 1997: 137). This statement suggests two assumptions: that fire was bad for the Mediterranean environment and that fires were set out of spite[7].

There is no doubt that fire can be a destructive force, but, just as some of the previous authors argued that grazing was a necessary component of keeping a well-managed environment, so have scholars suggested that fires play an integral role in maintaining a sound ecology. As emphasized by the scholars above, as well as by Butzer (2005, 2006) and Butzer and Harris (2007), disturbance is in fact quite natural and the Mediterranean environment is resilient. In fact, grazing and burning, along with cutting, pruning and coppicing all can be parts of a successful management system for a Mediterranean landscape (for example, see Blumler 1993: 288 or Trabaud and Casal 1989). More generally, this recognition of the positive effects of fires in the literature reflects a paradigm shift in thinking over the past half century. Total fire suppression has been replaced by a return to prescribed burns and the creation of let burn policies in many countries (see e.g. Blumler 2002 for a discussion of this shift in the US).

In sum, the past decades have recognized a reversal of many of the traditionally held views regarding the role of goats in the landscape. Succession and equilibrium are no longer universally applicable, pastoralism does not necessarily degrade the landscape, fires serve a beneficial purpose, and in general, the Mediterranean environment is

[7] This idea will be further contextualized within the discussion of the fourth common theme.

resilient rather than fragile[8]. The implications of these new trends have unfortunately not yet been applied to Cyprus' accepted environmental history.

The Actions of the Indigenous People

The fourth and final theme concerns the role of the indigenous people – as the history is presented, they are almost childlike in their ignorance, and it was necessary for the patriarchal British to teach them to have a "forest conscience" through patient education designed to make them realize that their age-old practices of grazing goats in the forest and felling techniques were bad. Indeed, it was one of the duties of the British as a colonizing nation to civilize (or modernize) the natives in this manner (see Lang 1878, Dixon 1879, or many of the Forest Department's *Annual Reports* or the annual *Cyprus Reports*). Baker, a well-known British explorer to the island, perhaps most clearly expresses these sentiments at the time of the British occupation: "If a hurricane had passed over the country and torn up by the roots nine trees out of ten, the destruction would be nothing compared to that wrought by the native Cypriote." But, "In my heart, I

[8] It should be noted that not everyone agrees with these new views. For example, Blondel and Aronson (1999) cite Thirgood and discuss how "with the development of powerful empires, all easily accessible forests were heavily damaged and sometimes destroyed" and "the nineteenth and, especially, the twentieth centuries have brought increasing severe destruction of vegetation in many parts of the Basin" (202). They still follow successional theory, and note that "given sufficient time, something resembling the primeval forest in a given site is the theoretically expected end result" (1999: 203). As another example, Scarascia-Mugnozza et al. (2000) argues that "Mediterranean forests are characterized by a remarkable set of features that make them naturally and aesthetically attractive, on the one hand, but also quite fragile, on the other" (97). This fact, combined with "the harsh and unpredictable climate, the difficult socio-economic conditions and the history of over-exploitation of the Mediterranean forests require …a scientifically sound conservation strategy" (2000: 97). Curiously, they cite di Castri (1981) that the extended human presence in the Mediterranean has caused co-evolution of the vegetation, including trees, with humans (much like Naveh 1995), but they then immediately cite Thirgood (1981) to explain how now, because of human activities, there are "progressively open and degraded woods and, finally, bare land with eroded slopes, especially in mountain areas" (2000: 102). As a final example of the tenacity of these ideas, de Vries and Goudsblom (2002: 42) cite Thirgood (1981) to argue that today's appearance of the Mediterranean environment is on account of human misuse of it, while in the same breath saying that cause-and-effect linkages are usually oversimplifications!

immediately forgave the poor people….They had been subjects of a bad government, and it was not their fault they were despoilers" (Baker 1879: 334).

This general description of the age-old battle of educated elite against ignorant native was a universal tale by the end of the 19th century. Guha (2006) provides an 1894 quote from Bernard Fernow, who would go on to become the Director of the Forestry Division of the USDA and later the Dean and Director of the short lived first attempt at a College of Forestry at Cornell (the first of its kind in the US). Much as the accepted Cypriot history, Fernow describes the atmosphere during the latter part of the 1800s in the US as being a "battle". "'The battle of the forest in this country is now being fought by man, the unintelligent and greedy carrying on a war of extermination, the intelligent and provident trying to defend the forest cover'" (80).

Thirgood (1987) illustrates the continuance of this idea of the ignorant native into the present when he states that the greatest hindrance to the successful implementation of forest conservation measures was "the outlook of the native Cypriot … who had traditionally viewed the forest as free for all to exploit or despoil for personal profit" (113). Further, as with the other themes, Cypriot authors also play their part in continuing this theme, especially in the context of the necessity of teaching the ignorant native, with the shift of course being that it is the Cypriot university-trained forest staff who need to take responsibility for teaching other Cypriots. For example, "The Forest Department should…*enlighten and encourage* private forest owners to form an Association…" (Michaelides 1999: 96, my italics).

Most modern critiques of this idea of an ignorant native in need of paternalistic oversight draw heavily on authors who many today would describe as being postcolonialists. Their critiques are meant to expose those areas which Western hegemony had stifled. Voices are being given to the voiceless, in other words, power to the powerless, or agency to those who were denied it. I do not wish to enter into a

theoretical debate about the state of postcolonialism per se, especially as just the term itself, let alone its trappings, has been so variably defined just within the field of geography (Sidaway 2000), not to mention the numerous definitions applied to it by other fields. However, in order to situate this stereotype it is necessary to briefly explore what postcolonialism, broadly defined, can contribute to an interpretation of the Cypriot environmental history.

The initial postcolonial approaches tended to create a clean break between the colonizer and the colonized. The generalization of the profit-driven, nature-destroying oppressive practices of the colonial officials and their policies was set in contrast to the generalization of the nature loving practices of the indigenous inhabitants who were perceived as living in harmony with nature prior to the arrival of the colonialists. As noted by Beinart and Coates (1995: 3), this idea of pre-colonial people living in harmony with nature has a long history within western intellectual thought. What has changed over the years, however, is the value judgment placed upon this portrayal. Quite different from the positive interpretation it commanded within this first wave of postcolonial work, it initially was utilized to adopt a view of the "'uncivilized and idle savage' who fails to capitalize on natural resource potential" (Beinart and Coates 1995:3). It is this original interpretation which one sees expressed in the Cypriot history.

Criticisms of this first wave of postcolonialism quickly appeared within many fields, although it is still not uncommon to find in writing by environmental activists and even some environmental historians (for example, see Worster 1988 or S. Guha 1999)[9]. For much of the academic world, however, the dichotomy between colonialist and native, or colonizer and colonized, was just too over-simplified. By presenting the natives as harmless children of nature, it denied them agency in the pre-colonial past, and by

[9] As stated by Beinart and Coates (1995: 5), "It has proved especially seductive for the disenchanted who seek inspiration in a precapitalist symbiosis of humankind and nature".

presenting the colonizers as being universally oppressive and all-powerful, it effectively denied the natives agency during the colonial period as well. In this new framework, the natives could resist and the colonialists were not all evil, although on a whole, the colonial experience generally was still an environmentally damaging experience (for examples of these concerns with the native role and the complexities of colonial rule see Said 1978, Guha 1983, 1989, Scott 1985, Stern 1987, Guha and Spivak 1988, Gallant 2002, and Given 2002, 2004). Rangan (2000) provides a heated characterization of the first wave of postcolonial work in research in the Himalayans which is worth quoting in full as it clearly illustrates the difficulties with this earlier work:

> The dramatic power of these narratives is enhanced by attributing a particularly malevolent role to the colonial state. The colonial state is caricatured as overwhelmingly powerful, autonomous from and thriving on antagonistic relations with civil society, and single-minded in its predatory pursuits that inevitably cause ecological degradation and impoverishment of the Himalayan communities…. It is the destroyer of precolonial harmony, the promoter of modernity against hallowed tradition, the harbinger of Western patriarchal modes of capital accumulation that undermine 'Oriental' feminine principles of nature, the diabolical agent of capitalism that transforms ecological utopias into lifeless terrains (23).
>
> Such assumptions regarding the nature of the colonial state – that it is a monolithic entity and single-minded in its predation of civil society – logically lead to two conclusions: first, that colonial rule was based on a remarkably coherent and tightly orchestrated set of policies that remained unaltered by the forces of necessity or contingency; second, that colonial administrators were endowed with extraordinary capabilities that would normally fall within the realm of demonic power or divine omnipotence. Both implications are historically inaccurate and frankly implausible (24).

Anderson (2002), in explaining his work on the colonial policies in Baringo, Kenya, provides a slightly less biting example of the necessity of recognizing a more contextualized colonial past.

> The politics of ecology in Baringo (or anywhere else in colonial Africa) were not, therefore, simply a product of colonial imposition: the colonial state in Kenya was never as powerful as it wished to be or (in the final analysis) needed to be….it is too easy to portray these disputes [over land] as being a conflict between colonizer and colonized … in which the ideas of an oppressive and overbearing

> colonial government were imposed upon a reluctant and sometimes recalcitrant African people.…It has long been widely recognized that the reality was a good deal more complex (11).

He further notes the role of the indigenous people in this conceptualization of the history, stating that colonial development policies

> most commonly … worked their way insidiously into the fabric of social reality through the active support of Africans whom the colonial state liked to term 'progressive' or 'modernizing'. To present African communities as the hapless victims of colonialism would be to deny the complexity of the social relations upon which the policies of development impinged and to deny the power of *agency, knowledge,* and *politics* (11).

Thus, modern scholarship over the past several decades has consistently called for an "unpacking" of this idea of the ignorant environmentally damaging native.

It must be noted, however, that applying a postcolonial approach to understanding the role of the indigenous people within the Cypriot accepted history, and more generally, understanding the complexities of this history, carries with it several caveats. Much of the early postcolonial scholarship was carried out in Southern Asia and Africa where, despite the presence of political forms (divisions) of power (e.g., tribes) a common postcolonial assumption is that there is an identifiable precolonial past. Whether the people in this precolonial past were ecological saints or sinners may be hotly debated (see Karlsson 2006 for a recent discussion of these issues) but the assumption of a pre-imperial past by both the colonial authors themselves (see Damodaran 2006: 128) and modern authors still remains. A primary goal of the postcolonial idea then becomes to allow for multiple discourses so that the oppressed tale can emerge from under the yoke of western domination. It is thought that this oppressed tale, created in a large part by contrasting the precolonial period with that of the colonial period, represents the true inhabitant, and in turn, unscathed by colonialism, it will help the country form a true identity, free from colonialist hegemonic overtones.

Common representations of Cyprus, however, as well as most of the Middle East and parts of the Mediterranean, alert one to the presence of a separate narrative. The colonial and postcolonial presentation of the precolonial past in British territories in Southern Asia and Africa, with the British period being the negative, exploitative and destructive period, largely falls apart when applied in this setting. The allusion to a precolonial past and the debates as to how sustainable it was and how it factors into the current identity are replaced by the unifying figure of the Ottomans. Thus, as seen within Cyprus' accepted history, one of the justifications for taking these lands is to rescue them from the inept management of the Ottoman government[10] – the classic west versus east scenario – rather than to rescue them from the inept hand of the native or to utilize them solely for their natural resources.

Two concurrent issues emerge for Cyprus in this setting. First, by the time the British gained Cyprus as a protectorate, they already were themselves concerned with conservation. Developing upon trends that can be traced back several centuries (see Grove 1995, also Rajan 2006), the colonial government became concerned with conservation only after realizing the destruction their earlier efforts had caused. In this setting, then, by the time the British arrived in Cyprus, they already had gone through their perceived destructive period (whether true or not) and had emerged as seasoned veterans who could use their knowledge in countries less advanced.[11]

Turning more specifically to the second issue, for Cyprus as well as several of the Eastern Mediterranean, Middle East and North African countries, identifying a pre-colonial past would require one to look back in history far deeper than just the 20th century colonial push. In other words, for an island such as Cyprus with a recognized

[10] This is of course a largely false stereotype of the Ottoman Empire. See Greene (2005) as one example of a more nuanced of the Ottoman experience.

[11] This ties in with the more general colonial view that the natives needed to be ruled for their own good so that they could be taught how to properly rule themselves; "empire as tutelage" in Pagden's (2006:51) words.

litany of multiple colonial rulers, the concept of a precolonial past that can be utilized to define one's identity as well as the natural environment is not fully applicable. A precolonial past on Cyprus is next to impossible to find. Rather what one finds is a series of pasts created under a variety of rulers. This suggests that in specific cases one must be careful not to be too complacent in imagining the most recent colonial period as being a watershed of environmental degradation as compared to previous periods. In line with the calls to not over-essentialize colonial rule and native influence, the colonial period was destructive in many aspects, but that does not completely imply that the colonial experience was always exploitative or that local rule (national rule) within a nation-state setting will magically halt degradation.

CONCLUSION

The accepted history of Cyprus therefore is formed around four stereotypes, all of which have been questioned and examined by scholars in a number of fields. Degradation is subjective, and political and cultural reasons exist for depicting past rulers as destructive. Forests have traditionally been closely connected with climate, but the extent of this connection is still being studied today. Neither goats nor fires necessarily lead to irreversible degradation; in fact, many Mediterranean landscapes have been created and sustained through the use of controlled burns and grazing. Colonial inhabitants and colonial rulers cannot be over-generalized into either environmental saints or environmental sinners, but rather a more nuanced view of them, based upon local contexts, must be developed. Thus, there are multiple reasons to question Cyprus' accepted environmental history from a variety of angles. Chapter 3 begins this process by examining the available evidence concerning the island's environmental history prior to the British occupation in 1878.

Chapter 3: Rereading the Physical Environmental History

As shown in the previous chapter, the accepted Cypriot environmental history is created around stereotypes which have been successfully challenged by scholars working both in the Mediterranean as well as in Africa and India. Thus, it can be readily argued that the Cypriot history is long overdue for a fresh analysis within this context. This chapter will focus upon the biophysical environmental history of the island leading up to the British occupation, while later chapters will focus on how to interpret the human-environment interactions within the British period itself. The decision to address the physical state of the environment first is deliberate; the assumption that the forests were in a degraded condition at the time of British arrival serves as a linchpin for most of the other elements of the accepted history. Notably, it is on account of this assumption that the history can make the seemingly obvious step to attribute the forests of today to successful British policies.

Since the current environmental history narrative is so commonly accepted and repeated as truth, however, trying to find sources to ascertain whether this history is based upon anything other than hearsay can be rather difficult. Many of the obvious scientific studies which one might utilize to help ascertain environmental history are either missing or scantily represented. For example, one might immediately think to look to dendrochonology to help understand the forest history. Unfortunately, as will be further discussed below, no intensive dendrochronological studies have been undertaken on the island. Geomorphological studies could be useful to help determine the history of key watersheds, as if the degradation over the years was as great as stated, one might expect to see changes in stream behavior or the sediment carried by the mountain rivers out of the forests and deposited elsewhere. The number of geomorphological studies have

been increasing in recent years, but again, this number is quite small compared to other countries. Similarly, one might think to turn to survey archaeology to try to help understand the livelihoods of the Cypriots once living near and in the mountains and thus speculate as to their impact on it. This as well, though, is only slightly represented – two survey projects have been conducted in the Troodos forests, and both of these were carried out by the same general group of scholars (see Given et al. 2002, Given and Knapp 2003). Further, the Cypriot environment itself poses problems and limits some of the more common techniques utilized within environmental history. For example, pollen, potentially quite informative, preserves poorly within the Cypriot environment. Attempts to obtain C-14 dates are also often thwarted by similar reasons.

In attempting to overcome these issues of data scarcity, I have followed multiple strands of research in order to piece together a general picture from the combination of the data within them. A series of travelers' accounts, descriptions of the forests by the first forestry officials, maps, and early sketches and photographs provide some clues, while unpublished dendrochronological work on the Troodos range, geoarchaeological analysis, and published work on the Ottoman economy as seen via landscape archaeology provide further information. I have described the information these sources provide below, divided into their individual categories.

HISTORICAL ACCOUNTS OF THE ISLAND'S ENVIRONMENT

Early Sources

Cyprus is mentioned in a fairly large number of travelers' reports[1]. As noted in the brief ecological description in Chapter 1, references to the island can be found within classical sources as early as two millennia ago. Although the environmental descriptions

[1] See Appendix IV for a more detailed account of the environmental descriptions contained within many of these sources.

contained within these reports can be questioned today (such as the statement that the Mesaoria was tree-covered), they nonetheless have remained quite popular within the accepted history. Following those classical sources, the reports are largely silent again until the 15th century, when a series of travelers, most of whom were on their way to the Levant coast, recorded their observations. The majority of these authors had only a brief stay on the island, if they even went on shore at all, so their descriptions are typically not rich, especially in terms of environmental descriptions (Grivaud 1990:23).

These limited early accounts describe a fertile island with forests and mountains. There is little emphasis on providing specific tree species names, although fruit trees, such as carobs and olives, are often mentioned. Carobs especially are presented as constituting a large economic industry. The presence of coastal forests is implied by Casola's 1494 account in which he describes gathering fuelwood from them (Grivaud 1990: 148-149). The 16th century accounts provide a similar general view of a fertile island with forests. Carobs, cypress and citrus trees are mentioned specifically.

The 17th century accounts provide more details. The slopes of Mt. Olympus, the highest peak in the Troodos Range, are described as being clothed in trees (Sandys in Martin 1998: 19), and the island is said to have a large number of cypress trees (Lithgow in Martin 1998: 23). Further, the presence of monasteries within the mountains is mentioned, as is the presence of mines. One can also find references to the dryness of the island, and the tendency of the "rivers" to dry up in the summer; Sandys (1615) goes so far as to state that the island should be described as having torrents which are frequently dry "for rivers it hath none" (Martin 1998:22).

The 18th century authors provide yet more details. These authors strongly latch on to a description of a poorly managed environment on account of Ottoman rule, a complaint that was less frequently mentioned in the 17th century accounts. Cyprus is still described as being fertile, but excessive Turkish taxation is argued to have resulted in a decline in

cultivation (for example, see Pococke 1745), and a concurrent decline in population is often suggested[2].

During his travels around the island's monasteries, Bars'kyj (1735; Grishin 1996), the Russian monk, notes that some monasteries are understaffed, but speaks positively of the dense forests and monastic gardens surrounding the many mountain monasteries. On the basis of the number of monasteries, his account further supports an interpretation that the monasteries held a sizable amount of power within the forests[3].

The effect of this taxation in the mountainous area, however, is variably described. Some, such as Pococke (1745: 224-230) describe seeing damage caused by pitch extraction in the Paphos forest (near Kalopanagiotis). However, at the same time, Pococke presents an overall positive description of the forests, noting the presence of cypress, especially in the Carpas, juniper, pine trees, and carob. He also notes the presence of iron mines within the mountains, but suggests that they were not being worked on account of a lack of labor. There are no complaints about goats; in fact, Pococke suggests that Cyprus is best suited for goats, as opposed to cattle. Finally, echoing comments by other authors, Pococke states that there are no rivers per se on the island, but rather "rivulets", the majority of which only flow for a portion of the year.

Drummond, the British consul to Aleppo, who was writing about the same time as Pococke, also provides a fairly detailed description of the island. Following what by now had become a common theme, he describes the beauty of the Solea valley, as well as the use of the water from various streams for irrigation of gardens. Traveling to the west along the coast, he notes the presence of a former working iron operation along the Krysochou harbor, but suggests that the ore itself was being transported out from the

[2] See the oft-cited Papadopollous (1965) for a discussion of declining population throughout the Ottoman period until the trend is reversed around 1850 and the population starts increasing (although also note that the book, while popular, could benefit from a critical review of the data). Much of his work is based upon his interpretation of many of the same historical accounts as recorded here and in Appendix IV.

[3] This point will be further discussed later in this chapter.

mountains. He describes localized deforestation from the mining operations by stating that the hills immediately surrounding the mine operation are bare of trees, while the areas at a distance from the mine are covered with good pines. Within the Paphos Forest itself he notes that one can find large pine and pitch fir, and a good business is made by tapping them for resin. From an outlook near Kambos, he sees a picture of verdure. While journeying between Kambos and Kykko he also sees vineyards interspersed between the trees. The Mesaoria, contrary to the classical sources, is described as being treeless. Drummond states that the Carpas is quite pleasant with wood on the higher grounds and gardens and cornfields on the lower grounds (Martin 1998: 57-98). There is no mention of the extreme felling along the Carpas which Pococke (1745: 219-220) describes as having been the result of raiders during this time.

Sibthorp's account, briefly described in Chapter 1, closes this century. According to Sibthorp, a trained botanist, both the Southern and Northern Ranges are tree-covered, the southern with pine and oak predominantly, and the northern with pine, cypress and arbutus predominantly. Further, there are enough non-forest trees (i.e., non-pines) to provide a plentiful supply of firewood for the island and with some remaining to export (Martin 1998: 107-116). However, Sibthorp also makes a distinction between the quality of the island's forests in terms of timber supply, and the presence of trees in general. Foreshadowing the complaints of some of the later authors, he notes that while Cyprus does have trees, in comparison to the forests of western European countries, the island's number of timber trees is quite limited (Martin 1998: 116). This description does not detract from the more general positive statements regarding the presence of trees in the mountains, although it does introduce the idea of forest value based upon its exploitative properties into the historical written accounts.

19th Century Sources

The situation of the forests going into the first third of the 19th century remains much the same, although the travelers' attention is primarily focused on describing the continuing reduction in population and the cultivation of the land on account of Ottoman taxes. Von Richter (1816), the young German traveler, is told that the forests are being destroyed, although he does not describe them. In the plains there are often complaints that uncultivated plots of land have become brush and thorny weed covered instead of "productive" (see Kinneir [Martin 1998: 146-152] and Turner [Martin 1998: 159-176]). If the population was indeed dropping, one might suppose that much of this brush growing on uncultivated land could be gathered for firewood, thereby decreasing the demand on the mountain forests. As before, the travelers note that the rivers are not perennial, and monasteries and goats are present in the mountains.

Unger and Kotschy (1865)

Unger and Kotschy were both well known German authors. They visited the island in 1862, while Kotschy also visited in 1840 and 1859. Their 1865 book represented the summary of their research and is referenced by many of the later authors, but they both also published shorter articles on the island separately. In his 1862 botanically-focused article, Kotschy provides a description of the Cypriot forests largely free of statements about destruction or degradation. The story has changed by the publication of the co-written 1865 book. As the majority of the negative statements appear in chapters apparently written by Unger, and Unger in 1866 publishes an additional article suggesting that Turkish rule has ruined the productivity of the island and forced the forests into the most inaccessible parts of the island, it might be wise to recall the earlier discussion on the subjectivity of definitions and descriptions of "degradation".

As Rajan (2006) convincingly argues, the Germans, as well as the French, had developed a clear view by that time of what forestry should entail, and how forests should look. Drawing support from classical sources, Cypriot forests did not merit Unger's approval. As opposed to a verdant, lushly vegetated landscape of forests spreading over the majority of the island, the forests were a disaster of trees widely spaced apart which suffered from excessive felling (especially *P. brutia*; *P. nigra* only in the lower, more accessible valleys) and resin collection (especially *P. nigra*), so that it looked as though the inhabitants were intent on destroying the forest.

More specifically, Unger describes an open forest with *Pinus maritima* (P. brutia) below 1220 meters and *Pinus laricio* (P. nigra) above 1220 meters. He states that throughout the Troodos it rare to find saplings and also not common to find younger trees. He notes that he had difficulty finding a tree without either mutilated wood or bark, and that the trunks were at times charred from fire. Firewood usually is gathered from undergrowth, and it is the duty of the women to collect the firewood. However, in forested areas where there is not much undergrowth, the women have to resort to felling young trees for firewood, thereby destroying the young vegetation. He states that the inhabitants only use axes and not saws, limiting the efficiency of their work. In what will become a frequently repeated statement, he reports that the inhabitants prefer to cut down a tree to get to its higher branches rather than climb up it, as much more wood can be collected in that matter in a smaller amount of time.

As noted above, Unger states that in *P. nigra* forest areas destruction is often linked with resin collection, which he argues can be just as destructive as large forest fires. He estimates that at least a third of the forest is damaged in this matter, although the inhabitants to whom he spoke profess that it is foreigners and not them carrying out these activities (he does not believe them). Unger states that there is little vegetation on the highest peak of the Troodos, and plants are only found in ravines or ditches in which

water accumulates. Some state that there are temple ruins on this peak, but he saw nothing, nor did Mr. Kotschy, who visited the same area 15 years prior.

It is not just the *P. nigra* and *P. brutia* trees which have been reduced from their former extent so that they only occupy the most inaccessible parts of the island that are suffering, but also other tree species. Unger specifically notes that there are also scattered remnants of several types of oak (*Quercus pfaeffingeri* and *Quercus inermis*) which now are present in a much more limited area and number than in the past. He also emphasizes the presence of *Cypressus horizontalis* in isolated or small groups on the slopes of the northern mountain chains which he assumes represented all that was left of their former greater extent.

As with his questions regarding resin collection, Unwin received what he thought were naïve (or unknowledgable) answers to his enquiries concerning who owned the forest. The inhabitants stated that they knew nothing about state rights to it, that the forests belonged solely to the creator, but that village municipalities did have the right to use the forest to the extent that it did not obstruct the same rights of neighboring municipalities. In sum, Unger states that general Troodos forest scene is a "picture of misery" and evidence of an irresponsible forest economy. He believes that neither the government nor the population understand the gravity of their mistake in mindlessly wasting this forest (Unger and Kotschy 1865: 484-500). This theme of mismanagement and destruction continues into the travelers' accounts from the latter parts of the 19th century as well as the 20th century.

De Montrichard (1874)

The description provided by de Montrichard (1874), a French forester about whom little is known but who appears to have been requested by the Ottomans to survey the

forests in 1873, does not provide a much rosier picture. As he views the situation, the forests must be in a degraded state, as the population is only a minute fraction of what it had been in the past, and yet the forests cannot support even their small amount[4] (37). The government legally has control over the whole forest, but practically only cares about reserving the large timbers for its navy[5] and has abandoned the rest to the population, who use and abuse them with no thought of preservation. The natural outcome of this type of unregulated usage is that one can not find any trees close to the villages or populated areas. There are rare parts still forest covered which were given by the rulers to important people, or which have been given to pious foundations for the maintenance of structures such as public monuments, fountains, or mosques, but there are not many of these (37-38).

Looking more specifically at the forest destruction, de Montrichard (1874) states that the Cypriots only use an axe in forest felling, and purposefully utilize for firewood the young trees as well as those trees which can be coppiced located nearest to their habitations. If the tree becomes too large to easily fell with an ax, or if there are no small trees nearby, the peasant will climb the tree, cut off the top portion as well as its branches, and leave the remainder standing[6] (38). The inhabitants also destroy trees by gathering bark for tanning purposes, and then collecting resin from the now mutilated tree (38). However, these activities are not to blame for most forest destruction; rather, the grazing of the goat and the lighting of fires for it by the shepherd are the true culprits.

[4] Note that the population figures upon which de Montrichard bases his degradation argument come from small references in classical sources which could be questioned. For example, the island is said to support 2 million inhabitants during the peak of the Roman period. To put this number into context, that would imply a population density of 216 people per km^2, over all parts of the island, including the extremely steep hillsides. For further comparison, the island today, with high rise buildings and large cities, only supports slightly over 1 million inhabitants (no exact numbers are available on account of the "Cyprus Problem", but the CIA estimates 1,040,000), which is only a population density of 112 persons per km^2.

[5] As will be discussed later, these claims are not supported within other sources from that period.

[6] While de Montrichard describes these activities as being extreme enough to kill the tree, done in moderation, coppicing is a suitable management technique that de Montrichard does recognize.

Unfortunately, in de Montrichard's view, Ottoman legislation, including the newly introduced 1870 forest law, does little to prevent the forest destruction described above, since it still allows for customary use of the forest (39).

The destructive actions of the Cypriots and the customary usage rights to forest produce contained within the legal structure lead de Montrichard to suggest that a full 50 percent of the 200,000 ha of potential forest area must be relinquished to the Cypriots. He sees no use in trying to prevent this from happening since the inhabitants are so poor that they could not survive if these rights were taken away from them. Further, if the government did try to enforce rules limiting their usage, he hypothesizes that those actions would only lead to hatred and fires (De Montrichard 1874: 39). On the remaining 100,000 ha of forest area, de Montrichard estimates that there are around 500,000 pine trees with a diameter of more than a meter, and out of these, only 400,000 could be easily reached for exploitation, including resin collection. De Montrichard also mentions other types of trees, such as oaks, but he clearly favors pines, the only species he views as being capable of commercial exploitation for timber and resin production (40). In de Montrichard's view, the general ruin of the island's pine forests, and in turn its environment, is so obvious that the entire population recognizes the degradation (41).

Thus, de Montrichard, as Unger and Kotschy, clearly describes the forests as being degraded. His reasons for this argument are open to some questioning, as they are partly based upon an inaccurate assumption about the number of people the forests would have supported historically. Further, de Montrichard's emphasis on the commercial wealth of pines, as also intimated a century prior by Sibthorp, likely alters his perception of the image of a sound forest. Since previous authors mention several tree species besides pines within their description of the mountain forests, the forest scene which greets de Montrichard did not actually vary that much from the scene which greeted the previous

travelers. The difference would be then one of perception as to whether a "healthy" and "productive" forest can contain multiple species and variously aged stands.

Löher (1878)

A later, less academically well-known German visitor who fancies himself to be a journalist, Löher, gains a larger audience for his work than some of the earlier German authors as his travelog is translated into English almost immediately after his 1877 journey. He incorporates many of the previous descriptions of degradation into his account, especially those of Unger and Kotschy. The descriptions within this account become widely accepted and transmitted among the early colonial accounts by British travelers and officials post 1878[7].

As one of his most dramatic descriptions, Löher draws from earlier accounts and then embellishes them to state that the inhabitants would cut down one thousand trees even if they only needed one hundred, as it was easier for them to choose the best looking trees when they were laying on the ground as opposed to standing[8]. They would then leave the rest to rot. Löher also suggests that both the ruling classes and the poor would try to increase their revenues by cutting down trees in the forests, which they viewed as unregulated commons outside of government protection (1878: 122).

Further, Löher implicates the "carelessness of the wandering shepherds" in lighting fires, at times just for the amusement of watching a tree burn, which they then do not control (1878: 123-124). He also points to the "recklessness" of the Cypriots in their attempts at resin collection which have left the forests "mercilessly destroyed" (123-124),

[7] Although it is not his name or Unger and Kotschy's names most associated with this tale, but rather Baker's name, whose account is described below.

[8] It is highly likely that he has adopted the general outline of this account from Unger and Kotschy (1865). De Montrichard (1874) includes a slightly different version of the story in his arguments that the inhabitants were too lazy and enamored with their axes to cut down anything but the smaller, young growth trees, or the branches and tops of the older trees. Nonetheless, his version still serves the same purpose as that of Unger and Kotschy and Löher of presenting the natives as wasteful, ignorant and lazy.

as have the "wanton mischief" of the Cypriot in avenging all disputes by burning and hacking down "each others' trees under the concealment of night" (124). Echoing previous descriptions of the island, the areas around villages and habitation sites, presumably both mountain and plain villages, are void of trees thanks to the Cypriots' non-sustainable pattern of use (124).

Löher also mentions his difficulty in finding anyone who could give him directions to Trooditissa Monastery within the Troodos, let alone Mt. Olympus[9], suggesting that the Cypriots "love their ease too well to undertake such kind of excursions" (1878: 78). In his narrative, the slopes leading up to Mt. Olympus are completely depopulated by humans, and the landscape is composed of groups of trees at a distance from each other as well as a "considerable growth" of stunted shrubs. To him, its "barrenness and desolation" look as though an invading army had devastated it, and he surmises that on account of the indolence of the Cypriots, he likely is the first person to reach the summit for many years (91-92).

Continuing with his account, as Löher heads toward Evrychou, within the Solea valley, he describes the lower slopes as being heavily wooded, while the upper slopes are just bare rock. This description is remarkably similar to Unger and Kotchy's frontpiece, made from an engraving on a copper plate, upon which depicting multiple trees on slopes would not be logistically feasible, even if present (see Fig. 3.1). This description of lush valleys and degraded higher slopes continues as he heads from Trooditissa Monastery through Phini to Khrysorrogiatissa Monastery in the southwest of the Paphos Forest. The slopes have trees scattered here and there, many of only stunted growth, which give him "an impression of barrenness and decay" (1878: 118), while the valleys have moss, creeping plants, various bushes, as well as even oaks, juniper and mastic trees (118).

[9] The highest mountain peak in Cyprus.

Panagia, which he also travels through on the journey to Khrysorrogiatissa, has multiple types of wild fruit trees surrounding the village (131).

Throughout his travels within the Troodos Range, he complains about the difficulty of maintaining his path, as he only has the stream and goat paths to follow (1878: 119). While following these evidently less than convenient paths, he comes across several of his “careless shepherds”, although in this setting he describes them as “fine fellows” who live a nomad life, wandering through the mountains with their flocks for much of the year (119-120). No mention is made of any degradation caused by them or their goats. Further, although he suggests that the mountain forests are largely uninhabited, especially in the areas west, north and south of Khrysorrogiatissa Monastery (133), he also notes that those who live in the mountains “love their native hills with an ardour not to be surpassed by any people in the world” (136).

We thus have a description composed of contradictions. Looking back over his reasons for forest degradation, Löher first complains that the inhabitants view the mountains as a no-man’s land with no sense of conservation - they will cut down ten times more trees than necessary and leave the rest to rot just to make the selection of the best trees in the lot easier. Leaving aside the simple observation that felling ten times more trees than needed does not sound like a lazy way of doing things, one must note that these are presumably the same inhabitants that Löher views are so lazy that they do not even bother traveling into the forests, or even know how to provide directions to reach the forests in Löher’s description. One could suggest that the woodcutters Löher refers to are separate from the people he spoke to about directions, which very likely is true, but, also following Löher, there are no inhabitants in portions of the forests. That is, of course, except for when he admits that there are mountain inhabitants, but those inhabitants “love their native hills” and therefore would not be expected to so brutally destroy the vegetation. Further complicating Löher’s description, the valleys within the forest, which

would provide some of the easiest sources of wood, are described as intact; it is the upper, less-accessible slopes that are deforested. Some might suggest that only pine trees, for their economic value, are being felled, hence the destruction on the higher pine covered slopes. If so, one should also consider how the lazy, careless, and reckless inhabitants are removing the felled trees from the forest, especially the higher slopes, if Löher himself has difficulties in following the goat paths and streams[10].

Further, the Cypriots are described as commonly avenging disputes by lighting each other's trees on fire[11] and this habit, combined with their destructive fuel-gathering habits, have left degraded areas around every village or occupied spot (122). Applying this logic to the inhabitants in and near mountains, one might expect to see descriptions of degraded landscapes surrounding each village. However, portions of the Solea Valley where Evrychou is situated is lush and green (although the upper slopes are viewed as bare), and Panagia is surrounded by multiple wild fruit trees. Where are the destruction-loving Cypriots who light fires for vengeance in this setting? Further, the presence of mountain inhabitants, both in villages and in monasteries, with a concern for the landscape around them, as Loher suggests, would also likely prevent various parts of the forest from being used as the no-man's land that Löher also describes.

Finally, Löher complains about shepherds, stating that they are a careless lot who leave fires unattended with no thought and even start fires at times as a way to have an amusing activity with which to pass the day. However, when he meets shepherds, he has only praise for them. Perhaps it is another band of traveling shepherds who are the fire-

[10] Later authors do indeed discuss the difficulties in transporting wood down from the steep slopes, especially with the lack of navigable rivers. Thomson (1878) provides an early example of these difficulties, while the complaints are still being made at the end of British, for example by Hummel (1954), a consultant hired to investigate the island's forest industry.

[11] Lowdermilk (1944) presents a remarkably similar ethnically and religiously charged description of the behavior of Palestinians, also open to the same questioning as the Cypriot account.

starters? Or perhaps Löher was stating what he thought the reader would most like to hear, regardless of whether factual or not.

Baker (1879)

Unger and Kotschy (1865), de Montrichard (1874) and Löher (1878) may set the stage for the accepted narrative, but it is the account of Sir Samuel Baker which is perhaps the most well known account of the Cypriot environment at the time of the British occupation. Baker spent eight months on Cyprus, and three of those months in the spring of 1879 were spent living by the Trooditissa monastery. He had prior, multi-year experience before 1860 in Mauritius and Ceylon, where he founded an agricultural settlement. Following that experience, he journeyed to the source of the Nile (Moorhead 1983 [1960]). He was 58 by the time that he came to Cyprus, so once can assume that through his numerous colonial activities, he had developed a good sense of the colonial development and conservation efforts of that time.

As with Löher, Baker (1879) presents a story of contradictions; his forest descriptions vary widely depending upon the context in which he is discussing the forests. While discussing his journey to Trooditissa and his stay near the monastery, his descriptions are quite positive. Phini and the valley around it is described as being green with a variety of types of vegetation near the stream bed. Differing from Löher's questionable statements, the upper slopes of the valley are described as covered with pines and flowers. Trooditissa Monastery itself, which had been negatively described as having derelict cultivation in the past (Unger and Kotschy 1865), is described by Baker as being surrounded by walnut trees, plane trees, and mulberry, while various fruit trees were grown in irrigated terraced gardens (1879: 311). Looking out over the surrounding slopes from the monastery's vantage point, Baker notes that one could see oak and arbutus. As

one looked at the higher elevations, the understory became scarce and tall pines and cypress took over on a surface of loose barren rocks (314). On the Mt. Olympus peak itself there were no trees, as Löher had also mentioned (373).

Baker describes the monastery inhabitants and a shepherd family living above him in fairly positive, although paternalistic, terms when not specifically dealing with woods and forests. The complimentary manner in which Baker describes the nine-member shepherd family is noteworthy, since most other authors of the time were fixated on the idea of shepherds as wild and lawbreaking. The children of the family are "remarkably well-mannered" and he even employs the youngest daughter, already accustomed to the life of shepherding at the age of five, to drive out his own flock of sheep each day. If their goats or his sheep do any harm to the surrounding trees, one would not know it from this section of his book (1879: 326, 374).

However, when Baker shifts into his chapter on woods and forests, the positive descriptions of Cypriots and their forests disappear. As he notes, there is a "terrible picture of destruction throughout the forests of Troodos" (1879: 374) "occasioned by the wholesale and willful destruction of pine-trees, which is the Cypriote's baneful characteristic" (326). Fewer than five per cent of the pine trees within the Troodos have escaped mutilation (326). As also described in Löher (1878: 93), Baker notes that the pine forests look as though they had been conquered by an enemy intent on their destruction (1879: 333-334). The Cypriot "with his unsparing axe" (333) has ruined pine trees at all elevations, and the number of felled trees reflect Cypriot incompetence and laziness (335). Goats, which de Montrichard (1874) had so strongly condemned, do not eat pines in Baker's opinion, although they and the lack of control by their shepherd are responsible for damaging other types of trees and gardens[12].

[12] Within this context, see Baker (1879: 317, 367-368) for a discussion of the goats' damage to the monastery garden, which Baker sees as being preventable by utilizing an organic gate of hardy berberris for the garden and see p. 368 specifically for a discussion of stunted juniper caused by goats.

Baker feels strongly that forest preservation efforts must be undertaken; the forests also need to be extended to cover all of the areas where they previously existed. The forest destroying inhabitants will accept these efforts provided they understand that the work is being done "for the welfare of the island" (1879: 338). Differing from many of the earlier authors, however, Baker argues that forests in the past only existed in the same areas which during his visit still supported woodland palimpsests, which therefore excludes the Mesaoria plain (341-342). He also notes the presence of vineyards within the mountains, which he suggests are primarily located on land previously forested. Finally, displaying what will eventually be found to be a false hope in the regeneration capabilities of Cypriot pine, Baker argues that by following a tree planting scheme, within ten years there will be a thick growth of young pine trees (339).

The picture presented by Baker as to the condition of the forests is therefore both similar and different from that of the previous authors. When speaking in general terms, his description of degraded forests and the poor characteristics of the natives is familiar from previous sources. However, his arguments that the goat does not eat pines (echoed by Cypriots) and that the Mesaoria would never have been forested are not as common. Further, as opposed to de Montrichard's defeatist attitude concerning the forests, he sees hope in reclaiming them, although as will be explained below, the purposes behind writing these accounts likely factor largely into that description.

Further accounts by forestry and government officials

The transmission of the accepted history certainly does not end with Baker, as the early colonial forest officers (Wild 1879 and Madon 1880 and 1881), under tight time constraints to prepare a statement of the island's forests, looked to these early reports for guidance and situated those same passages into their work. The amount of copying does

vary from author to author; Madon especially disagrees with several of the earlier authors on certain points, such as the planting of eucalyptus, larch, and cork oak. However, even Madon still falls back on the description of the forests as degraded, too widely spaced and with too old of trees with no young regeneration thanks to goat grazing, and he includes direct quotes from Baker. Later accounts of the forest at the time of British arrival, such as that by Biddulph (1889), rely upon Madon, thereby also utilizing the accounts described above, and versions of them can still be found today with little effort. For example, the official Forest Department webpage, accessed in June 2007, states the following.

> Previously, during the occupation of the island by Turkey in 1570-1878, there was no organized management or protection of the forests. The forests were then almost destroyed because of uncontrolled felling of trees and other vegetation, free grazing and large area land reclamation for agricultural development and also because of large scale fires[13] (moa.gov.cy, 1).

Interpretation of Written Accounts

Therefore, what emerges by the end of the first several years of British rule from the historical accounts concerning the previous environmental state of the island is in fact the framework of today's accepted history, full of contradictions and very indicative of the common themes discussed in the previous chapter. As can be easily seen in both the descriptions of Löher and Baker, they can only sustain the negative descriptions when they are dealing with the topic generally, but not when approaching it from the local level. The mountains are only an uninhabited no-man's land in the abstract; closer descriptions of them reveal villages and people. Similarly, the island's inhabitants are

[13] The unique, but equally untenable, aspect of this account is the statement concerning land reclamation for agricultural development. Most authors focus upon a drop in population until at least the 1830s, and other modern government publications note the population drop as well. It is difficult to imagine how large areas could be reclaimed for agriculture if the population did decrease as argued, and also in light of the travelers' complaints about uncultivated fields.

only lazy and wasteful in the abstract; Löher's native inhabitants care deeply about the mountains, while Baker's monks and shepherds are presented as gardeners and quaint law-abiding inhabitants. The areas surrounding villages are only denuded of trees if one is not speaking of a specific village; if a specific village is noted, it most often has trees surrounding it.

Summing up these inconsistencies, several points can be made about the descriptions of the island's forests pre-1878. The practice of resin collection and the grazing of goats were common over almost all the centuries, even those with positive forest descriptions. The number of forest inhabitants was variously described, but all describe the Solea valley as inhabited, and yet still green[14]. As highlighted in Chapter 1, the descriptions of tree species do not alter.

Rather, I would argue that the shift in travelers' descriptions reflect perceptions more than physical landscape change. As noted in Chapter 2, degradation is often defined in a subjective manner, and the Mediterranean landscape traditionally has been negatively described by northern travelers. This is not to say that the travelers were merely making up their negative descriptions (although I strongly suspect that some were depending heavily upon other's accounts and not their own experiences), but that the travelers saw what they wanted to see. The environment is not static, and as will be discussed further below, there could have been areas experiencing local deforestation (as Drummond recognized above). However, some degradation does not necessarily imply total degradation or even irreversible degradation.

Further, the travelers may have simply misinterpreted some of the things they saw. Thomson (1879a), a photojournalist who toured Cyprus in the fall of 1878, describes the difficulties in transporting the cut trees down the mountainside, as well as a scene in which logs are felled and awaiting the arduous transport process down the hillside (35).

[14] Indeed, it is still today an "oasis" of intensified and irrigated orchard agriculture.

Thus, while it is highly unlikely that one thousand trees were felled in order to obtain one hundred, at the same time, it is not inconceivable that the travelers might have seen some felled trees awaing transport down the mountain, even if they misinterpreted the reasons for the trees' presence by automatically assuming that the incompetent natives had left them there to rot.

Thomson, in a later 1879 publication, also provides insight into another explanation for some of the fallen trees. He states that when he asked why he saw trees rotting on the ground, he was informed that they had fallen of their own accord, and that the inhabitants did not have an immediate use for them (101). As support of this, a colonial forester in 1934 pointed out while presenting a climatic succession model for the forest that,

> The natural cycle, I consider is that a fire or tempest wipes out the old forest over a large area and this is replaced by shrubs and bushes. Later trees come in and they grow up into forest … until another accident wipes them out. Half a century or a century may elapse between the destruction of one high forest to the formation of the next (Foggie in SA1/460/1934/2).

According to Foggie, the old trees which are wiped out in each of the above destructions remain on the ground until they are either removed or decompose (SA1/460/1934/2).

Finally, one must emphasize the importance of the intended audience in each of these descriptions, especially within the context of the political and cultural scene surrounding the occupation of the island. Baker and Kitchener, who undertook the first trigonometric survey of the island, provide excellent examples of this. Both of them traveled over large parts of the island and presumably were describing things they themselves had seen, as opposed to some of the earlier travelers who likely inserted descriptions of places which they had not visited.

Baker included in his travel book many calls to action for Britain to overthrow the damage caused by the Ottomans, such as "we, the English, have the power to make [the Cypriots] rich" (Turkish rule made them poor) and "England has acquired the reputation

of the civiliser of the world" (Baker 1879: 359). Within this context, he not surprisingly describes desolation within the Troodos range, as noted above.

Kitchener, on the other hand, was writing a piece for a popular magazine (*Blackwood's Magazine*) with the intention of painting a rosy picture of the empire's latest acquisition to the average British citizen. He comes across as more supportive and optimistic of Britain's decision to take Cyprus than Baker, and his environmental descriptions follow a similar tone. For Kitchener, the Troodos Range was a picture of prosperity; near Lefka "The hills around are full of mineral wealth and clothed with mighty pines…."(1879: 60). "To the west the mountains get wilder, and the pine-forests grow larger and more dense" (60) and "Kiku … can also be seen in the pine-covered hills" (61).

In other words, Baker, who was trying to emphasize the amount of work ahead and justify the presence of the British on the island, states that the island's environment is degraded and that it needs to be fixed (and that the British have the capability to fix it). Kitchener, who was essentially trying to encourage "warm fuzzy feelings" for the island, describes the forests as beautiful and lush. Which description is the correct one? Likely neither, as the truth can probably be found somewhere in the middle.

MAPS

A careful perusal of the maps available on the island, especially if they include any environmental data, can help to ascertain the validity of the above travelers' descriptions. Published maps of Cyprus appear in the early 1500s, but the first detailed map of the island, by Ortelius, does not appear until 1573 (Fig. 3.2). The level of detail on Ortelius' map is impressive, as it is the most comprehensive map of toponyms prior to Kitchener. Navari (2003: 82) suggests that the map is based upon physical surveys carried out in

Cyprus near the end of Venetian rule as the Venetians became more concerned about a Turkish threat.

A large number of the maps following utilize his basic outline of the island, and it is not until the mid 1800s that maps appear which add anything new in terms of environmental data. The "Essai d'une Carte Agricole de l'Ile de Chypre" by Gaudry and Damour (1854, in book published 1855) specifies the ethnicity of the various villages as well as identifies six different types of vegetation, including cultivated fields, large tree plantations, vineyards, principal gardens, wooded uncultivated areas, and uncultivated areas with no woods (Fig. 3.3). It is based upon an unpublished map by de Mas Latrie, who publishes his own map in 1862, although it does not include any environmental information[15]. Unger and Kotschy (1865) include a geological map with their work, but do not note vegetation on it (Fig. 3.4). Kitchener's survey of the island, which appears over two decades later (Kitchener and Grant 1885), represents the next source of environmental data. As can be seen in Fig. 1.10, Kitchener's map is an invaluable source of information regarding the island's environmental state and the location and ethnicity of villages at the time of British occupation[16]. Since the amount of data on Kitchener's map can be difficult to represent in a small space, I have also included a slightly later (1892) unpublished map of the delimited forests at that time to better illustrate the extent of the forests (SA1/3470/1898)[17] (Fig. 3.5). Some caveats and explanations are necessary with this map, however. Certain forested areas were still in limbo because of the Sultan's

[15] De Mas Latrie (1862:10) demurely downplays his role in the previous map by Gaudry and Damour, noting that they included his name out of friendship and delicacy when they published their work before he had the chance to publish his own (he had gathered most of his data by 1849), and notes that his work benefited greatly from their research.

[16] Kitchener's survey was a shining example of the trend toward creating fixed boundary maps utilizing geodetic equipment during that period. See Home (2006) for a further discussion of the role of survey within British colonialism. Anderson (1991) provides one of the most accepted views of the role of maps and mapmaking in creating identity.

[17] The Cyprus State Archives would not allow color photocopies or digital images to be made of their materials. Colored pencils were used to trace over the black and white photocopy to try to maintain its meaning.

claims, most notably Akamas, Randi, and Orites forests, hence their absence. Further, some growth may have occurred in the years between 1878 to 1892, and conversely, the Forest Department was known to delimit lands that were not truly forests. Nevertheless, this map does give a fairly reasonable approximation of the forest lands at the time of British occupation.

What information do these maps add to the historical written accounts? By comparing place names on the early Ortelius map with those on Kitchener, one sees a large amount of overlap, even within the mountain valleys of the Southern Range. This strongly suggests that the mountain valleys have been consistently populated over multiple centuries. Data are not available to answer the question of the size of the population of these habitated areas, and in some cases the population living near the mountain churches may have been small, if any. However, even with these caveats, it still is quite clear that any general suggestions, such as Löher's, that there were no Cypriot inhabitants in the mountains must be questioned. While there may not have been permanent settlements on some of the steeper slopes[18], there certainly were permanent inhabitants in the valleys.

This knowledge of a centuries-long population also sheds doubt on claims that the inhabitants viewed the forests as a free-for-all that they were quickly destroying. For the population to persist in the mountains, they must have developed some sort of a sustainable manner of living, otherwise one would assume that they would have fled the mountains or, at the least, the landscape surrounding the mountain villages would not be so frequently described as green, well utilized (terraced vineyards, gardens), and usually containing forested slopes. The Ottoman Land Code[19], which closely followed Mediterranean common law, did grant to mountain inhabitants the right to gather

[18] Although, as will be discussed below in the landscape archaeology section, there could have been temporary shelters for shepherds or vineyard owners/tenders.
[19] Discussed in more detail in Chapter 5.

firewood and wood for constructing agricultural implements for free. However, as also mentioned above, one should not automatically assume that that right would be practiced with no regulations. Rather, within the framework of their sustainable mode of living, there likely were customary regulations regarding the forests, set in place both by the villagers and the monasteries (see Vassberg 1984 for a discussion of customary regulations within the "commons"). The frequently described "free-for-all" in the mountains appears to be based upon a misunderstanding of the travelers as much as it is based upon any concrete evidence[20].

Turning more generally to the vegetation and forest extent, on all three maps with vegetation marked the mountain ranges are presented as being covered with forests. Vineyards are frequently presented on the southern slopes of the Troodos. However, there is some disagreement as far as the extent of forest cover outside of the high mountain peaks, as Gaudry and Damour's map illustrates woody vegetation continuing along the lower portions of the Troodos mountains and on the spurs leading over to Stavrovouni. The vegetation on this map closely follows the geological properties of the island; in fact, Unger and Kotschy's geological map of 1865 could almost take the place of this map by simply exchanging the geological labels with those noting vegetation[21].

Gaudry and Damour's depiction of a continuously wooded stretch of forest continuing over to Stavrovouni also is not supported by the travelers' accounts. The suggestion that the area had been forested is not new of course; earlier travelers had argued as much by utilizing the classical sources and in turn equated the lack of trees with degradation. However, these accounts present this deforestation as occurring in the past, so that by the time Drummond visited in the mid 1700s, Stavrovouni is described as having a "parcel of low pitch firs … none the size of timber" and he states that his

[20] See Chapter 5 for a further description of land tenure on Cyprus.
[21] In fact, Unger and Kotschy are claimed to have based their map off of that by Gaudry and Damour (Navari 2003: 152).

traveling party crossed over many "bare hills" on his journey to Stavrovouni (Martin 1998: 73). Light (1814 visit) and Turner (1815 visit) both describe Stavrovouni itself as having vegetation; for Light, myrtles and fir trees (Martin 1998: 157) and for Turner, pine bushes and brush-wood, in other words, secondary scrub (Martin 1998: 170). However, they also both describe the situation of the surrounding countryside in less positive terms – briars and olives for Turner and bare mountains surrounding Stavrovouni for Turner (Martin 1998: 157, 170). Thus, if there was truth to the depiction on the map, it would in fact argue that sizable regeneration had occurred during the Ottoman period, and would in turn question the multiple statements about Ottoman forest mismanagement. However, for this interpretation to be accurate, one might also expect travelers' accounts from the same general period to mention these forests, such as Unger and Kotschy, and instead they present a picture of degradation.

The later maps also do not display the same extent of forests, and as seen in the figures from Chapter 1, the forest areas remain essentially the same throughout the British period, even with reforestation efforts. This implies that the Gaudry and Damour map itself was inaccurate or that the area had been deforested by the time of the British arrival and it was too severely damaged to restore even with British forestry attempts. The colonial officials assumed the latter, and early forestry officials such as Madon utilized it to develop an argument that the forests were most damaged in the three decades or so preceding the British arrival[22].

If the area had been deforested in the mid to late 19th century, it is uncertain as to what purpose such a deforestation would have served. Consular reports from the latter half of the 19th century do not include pitch or timber with their accounts of exports (Savile 1878), although exports of charcoal were evidently occurring on the basis of an early

[22] In the eyes of Dobbs, the Principal Forest Officer in 1884, this also implies an increasing number of goats, which are circularly blamed for the degradation (SA1/3256/1884).

Order in Council disallowing the export of charcoal (Hutchins 1909:21 states that the charcoal was exported to Syria and Egypt). The population of the island was said to be increasing thanks to the overall modernizing trend within the Ottoman empire starting in the 1830s, and one could argue that an increasing population would begin cultivating areas which had been previously left to develop into scrub; however, a cholera outbreak in the 1860s also served to decrease that population (Hill 1952: 188, 373, 378). To sum up the situation, although there are not available data to conclusively dismiss Gaudry and Damour's representation, I would nonetheless argue that based upon the information presented above it is just as reasonable to assume that the map overgeneralizes and mispresents reality as it is to assume that all of the other sources of available information are incorrect.

SKETCHES AND PHOTOS

We do not have to limit ourselves to just written descriptions and maps, however; we also have drawings and photos. The cliché is that pictures can tell a thousand words, but that does not necessarily mean that they are accurate words. As with the travelers' accounts, these images seem to be largely shaped around what the image maker wanted the audience to see, and therefore their objective utility can be questioned. Pictures of the top of Mt. Olympus, such as Fig. 3.6, are often utilized in arguments concerning deforestation. However, an overview of the travelers' accounts will reveal that the top plateau of that peak is frequently described as being treeless[23]. A military installation is at the top of Mt. Olympus today. Pictures of the area are not allowed, but an aerial view of the peak can be obtained via Google Earth which shows that unfortunately the installation

[23] Unger and Kotschy (1865: 496) refer to it as a treeless dome, while Holmboe (1914: 250-251) calls it a mountain field similar to one a traveler might find in the Alps.

covers the majority of the peak, making it impossible to definitively comment upon the natural vegetation. Despite these difficulties, on the basis of prior accounts one could argue that the peak is naturally sparse with trees, human interference or not.

It is possible, however, to obtain pictures of the slopes near the peak, and Fig. 3.7 (1865), Fig. 3.8 (1878), Fig. 3.9 (1913), and Fig. 3.10 (2003) all display a rocky, open-spaced woodland. Although many of the late 19th century authors interpreted this landscape as degraded, these figures nonetheless clearly indicate that these slopes have remained essentially the same even after decades of enforced protection of these heights. This implies that whatever reason(s) is behind the open spaced aspect of these pines, it cannot be solely, if at all, blamed on human action, and further, it is not a recent phenomenon.

DENDROCHRONOLOGY

There are no long-term, published dendrochronological studies of the forest. This is unfortunate, as they could answer some of the more basic questions regarding forest destruction. In an attempt to fill this gap, I assisted Sturt Manning in 2004 in obtaining cores and slices with the support of the Forest Department. Unfortunately this data has not yet been analyzed. However, unpublished data was acquired from cores extracted in the 1970s by Carol Griggs. Her summary of the data is discussed in Butzer and Harris (2007); she suggests that there were localized cycles of deforestation in the late 1500s to early 1700s and mid to late 1700s within the Troodos Range.

What those cycles of deforestation indicate, however, is less clear. Barsky (1735) and Sibthorp (1787) describe a well wooded forest during the early 1700s and late 1700s respectively, adding strength to the interpretation that this was localized deforestation. The travelers do often assume that deforestation would have occurred for shipbuilding,

and one could point to those demands as a general explanation for the data. However the actual evidence for shipbuilding during the Ottoman period is slim. Records indicate that the Ottomans were importing ship masts at the end of the 1500s (Jennings 1993: 325), and an American missionary in the early 1800s complains that no shipyard exists (Tollefson 1990).

If the wood was not being used for shipbuilding, what other actions could be deforesting the area? Borrowing from later complaints within the mid 19th century, other reasons for deforestation include excessive woodcutting for timber, firewood and wooden implements, destruction of trees via resin tapping, and general wastefulness. However, even if one assumed that there was some truth to the 19th century accounts, and those complaints could be reasonably applied to the earlier periods as well, one is still left with some difficulties. Pine would have been the primary source of roof timbers (see Fig. 3.11 for a presentation of the typical roofing style of the mountain villages in the 1860s; wooden rafters, topped by dirt, and in turn topped by brushwood). Pine of course would also be important for resin, but species such as oak, rather than pine, would have been utilized for crafting wooden implements such as ploughs or bread troughs, and firewood would have been obtained both from the branches of pines (Thomson 1879b: 102), as well as from species which could be coppiced, such as oak or arbutus. A final explanation for some of the localized deforestation, although infrequently mentioned, is that of naturally occurring wildfires.

As for earlier periods, travelers also frequently point to deforestation for shipbuilding during the Venetian period. Although there is not specific dendrochronological information available to investigate these claims, there are indirect reasons for questioning them. Karl Appuhn (personal communication), based upon his extensive knowledge of the Venetian archives, has found no reference to Cypriot timber for shipbuilding within the archives, and strongly doubts that the Venetians would have been

utilizing the Cypriot forests in their shipbuilding efforts. Adding further support to this doubt as to Cyprus' role, the art of shipbuilding was a closely guarded state secret, and in order to ensure that the secret did not fall into the wrong hands, shipbuilding yards were most often situated close to Venice and relied upon northern Italy's forests (Lane 1934, Appuhn 2000).

Thus, the dendrochronological data, although slim, further contextualizes the picture of the Cypriot environmental history, but it also asks as many questions as it answers. Localized felling which then had the chance to regenerate was occurring during the Ottoman period, although it is uncertain as to how or why these fellings were occurring.

GEOARCHAEOLOGY

As yet another methodological approach to understanding the history the island's forests, geoarchaeology can provide a wealth of information about the island's past environment. Previous accounts have often argued that the assumed prior deforestation on the island would have led to increased erosion within the mountain slopes. Alluvial deposits along streams within the Troodos range are therefore assumed to represent human interference, although recent publications have been presenting data with which to question this assumption, both in the Troodos region and in Cyprus in general. Key studies which can be utilized to help address this issue include Butzer and Harris (2007), Deckers (2006), Devillers (2003, 2005), Devillers and Lecuyer (2007), Given et al. (2002), Given and Knapp (2003), and Gomez (1987, 2003). Butzer and Harris examine watersheds within the central Troodos region as well as several archaeological sites located outside of the range to provide a finer scale record to supplement that of the watersheds. Deckers' work is focused within Western Cyprus, while Devillers' work concentrates on sites in the east of the island, primarily the Gialias River watershed near

Dhali-Potamia, but also the Pedieos River watershed near Famagusta. Given et al.'s work focused for several years on the NE Troodos foothills, and Gomez conducted research within the lower Vasilikos Valley, which drains the eastern Troodos range.

The above accounts do not always agree with each other in terms of the effect that humans have had on the landscape versus that of climate, especially the effect of the Little Ice Age (1550-1850) for the more recent historical periods, but they do all share a similarity in their concerns with fully investigating the climatic effects on the island. Devillers and Lecuyer (2007) argue that although the Little Ice Age (LIA) has been frequently described as a period of environmental crisis throughout the western Mediterranean, its effect on semi-arid Cyprus appears to have been somewhat different. Specifically, the authors suggest that climatic impacts on the landscape in the shape of droughts and flash floods (which may in turn have led to population emigration) would have been more common before and after the LIA than during it. If their findings are correct, it would imply that perhaps climatic effects played a part in the increased negativity of traveler's accounts during the mid 19th centuries, although there is not a corresponding increase in negativity from accounts pre 1550 (perhaps indicative of the small number of accounts). However, as their findings relate to the Gialias watershed in the east of Cyprus, one should be cautious about immediately applying them to the western Troodos range as well.

Turning specifically to the Troodos range, Decker's (2006) data and Given and Knapp's (2003) data can be interpreted as beign consistent at times with data from Butzer and Harris (2007), who argue that the flood regime of Troodos streams has actually been rather calm over the past several centuries. This is evidenced by the large scree deposits "locked" or "static" within the upper levels of the analyzed watersheds of the Troodos range, especially within the Asinou Valley. As Butzer and Harris (2007) suggest, "…cobble-lags in the Troodos foothills are part of an inherited Pleistocene legacy.

Braiding stopped many millennia ago, and the braidplains are fossil…" (16), and thus the temptation should not be followed to see alluvial deposits within the mountains or "braided" streams traveling through the foothills as proof of human-caused environmental degradation, regardless of whatever else may have been happening on the island[24]. In sum, more fieldwork throughout the island will be necessary to piece together a detailed understanding of the island's past environment which distinguishes between local and regional human and climatic effects. On the basis of the data currently available, however, which indicates a cyclical rhythm of erosion and deposition throughout the Troodos catchments, it appears safe to suggest that the importance climatic anomalies was at least as important as land use practices over the last several millennia (Butzer and Harris 2007: 19).

LANDSCAPE ARCHAEOLOGY

The mountains, which were largely ignored by archaeologists on Cyprus in the past, are beginning to attract more attention (see Given et al. 1999, Given et al. 2002, Given and Knapp 2003, and Burnet 2004). This recent work supports an interpretation of a developed forest economy within the mountains stretching over several centuries. Villages, roads, even threshing floors have been uncovered which do not exist on official maps.

In his 2000 piece, Given provides a detailed description of the Ottoman rural economy based upon data gathered during archaeological surveys as well as historical sources. When discussing goat grazing he makes a distinction between the type of grazing practiced by a typical villager, and the type practiced by the numerous monasteries located within forested areas. According to his research, the village based pastoral

[24] Although of course it must be noted that activities over the past century can and do affect the watersheds. For example, quarrying activities have dramatically altered the appearance of the Pedieos and Peristerona rivers, while the action of bulldozers in creating paved roads within the mountains has increased erosion.

economy would have been based upon most homes keeping a flock of around ten goats or sheep, as well as growing cereals, vegetables, and olives, dependent upon their geographic setting[25]. The animals would be kept in the house's courtyard, and would be driven out of the village to graze each morning and returned each evening. Some of the villages may have practiced more intensive grazing than that, actually migrating with the herds up into the mountains at certain points of the year, but the economy would have still remained a small, localized one (9).

This village based pastoral economy was quite distinct in both economic and social terms from a pastoral economy centered upon larger stock-breeders, represented by monasteries within the mountains as well as larger estates. In these situations, professional shepherds would be hired to manage the flocks. This claim is supported by the presence within the forests of goatfolds, or mandras, most of which "clearly date to the nineteenth century and before" (2000: 15). There are not clear published accounts which specify the herd size of the Ottoman professional shepherds. However, there are for the British period, during which it is suggested that shepherds would have needed to keep at least sixty to eighty animals in order to support themselves, and one might assume that the number managed within the Ottoman period may have been similar (Given 2000: 15).[26] It is assumed that these shepherds would spend at least part of the year within the mountains with their flocks, as suggested by the mandras. Christodoulou (1959) also supports these claims, as he notes that the pastoral economy on Cyprus was a long-established practice by the time of British rule, and "the forests were particularly

[25] Families living within the mountains may also have owned land on the lower slopes for cultivation. This general combination of livelihood strategies (herding and farming, often practicing viticulture and fruit tree cultivation as well) is quite similar to accounts of Mediterannean polyculture elsewhere, practiced as a type of rick management strategy (see Butzer 1996, 2005).

[26] Alternatively, the discussion within file SA1/1680/1926/1 suggests that eighty is too low a number for the 1930s. In general, though, it could safely be assumed that a professional goatherd would most likely not keep any less than sixty to eighty goats, and some might keep more depending upon the location and their skills.

sought after in the summer after the coarse grazing and the stubbles in agricultural land had been grazed" (112).

Also associated with pastoralism, Given draws support from Bars'kyj (Grishin 1996) to state that "many of the poorer or more remote monasteries relied on pastoralism for their livelihood…" (2000: 16). He provides several types of evidence for this claim as well as points to the general overall importance of monasteries within the mountain landscape and its economy. Turning first to grazing, historical sources indicate that the monasteries fought strongly to protect their grazing rights. In a case from 1786, Kykko Monastery[27] appealed to Constantinople over an attempt by a landowner of Levka to charge them for grazing on his land. Constantinople sided with the monastery, and instructed the landowner to allow them to graze their goats for free (Given 2000: 16). Further examples from the colonial period of the tenacity of the monasteries at protecting their rights will be presented in Chapter 5.

More generally, Given (2000) argues that the monasteries played a large role in the entire rural economy, as they could afford to own items such as olive and wine presses as well as water mills thanks to their agricultural and pastoral activities, as well as village religious contributions (13). Thus, although the colonial authorities do not allow for this, the accounts of Bars'kyj, indirect statements by the colonial authorities themselves, and Given's arguments point to the fact that the monasteries held a major religious, political, social and economic role within the mountain landscape. That role clearly clashes with the idea of a free-for-all culture in the mountains.

Finally, landscape archaeology also provides support for other uses of the forest, such as the vineyards noted on the maps and in the written accounts. Field shelters associated with seasonal vineyard management have been found on these slopes, supporting an

[27] Kykko Monastery is the largest and most powerful monastery in Cyprus.

interpretation of a developed viticulture industry located within the forests during the Ottoman period (Given 2000: 16-18).

COMBINING THE DATA

Several points can be extracted from a consideration of the above data sources, each of which contradict key points of the accepted environmental history narrative presented in Chapter 1 concerning the environment leading up to the British occupation.

1. On the basis of Butzer and Harris (2007), it appears that there have not been many large scale erosion events within the Holocene period in the Troodos region, suggesting that whatever deforestation was occurring within the Troodos, such as the repeated accounts of classical deforestation for mining works, it was not large enough to trigger a corresponding erosion event.

2. Archival work conducted by Karl Appuhn (pers. comm.) and the accounts of Venetian shipbuilding contained within Lane (1934) and Appuhn (2000), suggest that it is extremely unlikely that the Venetians were utilizing Cypriot timber in shipbuilding. Importation of timber necessary for masts at the beginning of Ottoman rule and a complaint about the lack of a shipyard on the island in the 1820s also suggests that Cypriot timber was not being heavily utilized in shipbuilding during the Ottoman period either. One must assume that the Cypriots themselves would have been making ships for centuries, although little is recorded about neither their construction techniques nor their sources of wood.

3. Dendrochronological data does indicate localized episodes of felling and regrowth within the Southern Range forests during the Ottoman period, but there is no evidence for full-scale degradation.

4. Maps, landscape archaeology, and many of the travelers' accounts point to the existence of monasteries and villages within the mountainous terrains for centuries. The continued presence of these villages and monasteries and the travelers' descriptions of lush, green vegetation surrounding them strongly suggest that these inhabitants had developed sustainable ways to live within the environment. Further, following Given (2000), the monasteries likely exerted a sizable amount of control over the surrounding countryside, and following de Montrichard (1874) the villages and monasteries had customary use rights over at least half of the island's forested area. This data suggests that the mountain areas were not functioning as an unregulated commons, open for all to use and abuse during the Ottoman period. Rather, the monasteries and villagers likely had a series of regulations to ensure their continued ability to live off the land through the centuries.

5. Travelers' reports frequently mention the aridity of the Cypriot landscape, as well as the repeated occurrence of droughts on Cyprus through the centuries[28]. As noted in Chapter 2, the early foresters made a strong connection between forests and rainfall, and thus these droughts are often interpreted as signs of previous forest destruction. However, as noted in the points above, there is no evidence to point to a dramatic reduction in forest cover in any of the previous periods. Droughts in the Cypriot environment, therefore, must not be taken as a guaranteed indication of forest destruction. Droughts can play a

[28] Droughts are specifically noted in 1768, 1835, and 1870-1874. During the British period the droughts continued in 1887, 1901-1902, 1931-1934, and 1941 (Hill 1952).

role, however, in how a traveler describes the Cypriot environment. Notably, there was a drought in the early 1870s, an event which easily could have left Cyprus appearing more dry, desolate, and perhaps even burnt (on account of the increased risk of natural fires) than usual to a British officer arriving in the normally dry summer months and seeing Cyprus for the first time with little prior knowledge of its climate.

6. The shift in the travelers' accounts from positive descriptions of the forest to negative descriptions in the mid 19th century, and the inability of the later 19th century authors to consistently support their generalized statements, argue for the need to view these commonly cited descriptions with much care. To restate this point, degradation is as much a matter of perception as it is a matter of a quantifiable environmental fact. It is quite likely that the strong statements of Cypriot forest destruction at the end of the Ottoman period arose primarily out of perceived degradation based upon a false idea of how the landscape had traditionally appeared, rather than any major change in the physical landscape during the preceding centuries.

THE NECESSITY OF TAKING AN UNPOPULAR STANCE

Rackham (2001 [1976]) informs us that, "A fascinating aspect of anything to do with trees and woods is that there is a rival version" (23). Within this context of multiple versions of forest history, he expresses concern with the presence of "pseudo-history" in general, defining pseudo-history in simple terms as something which "has no connexion with the real world, and is made up of *factoids*. A factoid looks like a fact, is respected as a fact, and has all the properties of a fact except that it is not true" (23). In his experience, one can not get rid of pseudo-histories by publications[29]. In sum, "Pseudo-history … is all

[29] Whether ironic or tragic, Rackham's own publications tend to show the truth of this statement. In publications spanning several decades he repeatedly returns to the need to recognize and overturn certain histories, but the public do not appear to be listening.

the history that most of the public … ever read; much of what passes for conservation is based upon it" (25).

Rackham is of course not alone in his concern about the repeated assertions of factually unsupported information. Writing about a topic which is directly relevant to much of the literature on Cyprus, namely the ideas contained within Hardin's (1968) "Tragedy of the Commons", Susan Buck discusses the term *Tonypandy*. It was coined by the author Josephine Tey, and it describes the "situation which occurs when a historical event is reported and memorialized inaccurately but consistently until the resulting fiction is believed to be the truth" (1985: 49). For Buck, Hardin's repeated use of the medieval English commons as an example of an area of unregulated usage, essentially a free-for-all (similar to how the British viewed the Cypriot forests) is an example of a Tonypandy.

On the basis of the limited physical data, it appears that the accepted environmental history leading up to the British occupation may well be one of one of Rackham's "pseudo-histories" or a "Tonypandy" in Buck's description. As illustrated, the history has little factual support, and, as shown in the previous chapter, it is also constructed around common themes which have been repeatedly questioned by scholars working throughout the world, including the Mediterranean. The continued existence of this narrative and an often perceptible resistance to altering it (as seen in the Forest Department's history) reflect the craft with which it was created.

The removal of the linchpin of the accepted narrative (the ruined environment at the time of British arrival) provides the necessary backdrop against which to examine, via archival and ethnographic data, the forest policies which emerge in the British colonial period, the motivations behind them, their effects, and the intersecting roles played by British officials, Cypriot elites, and Cypriot villagers throughout the process. If the forests were in the same general state at the end of the Ottoman period as they had been throughout it, where does that leave us in terms of questions regarding the policies

themselves? What were the colonial policies doing, if not saving the forest? These questions will be examined in Part II.

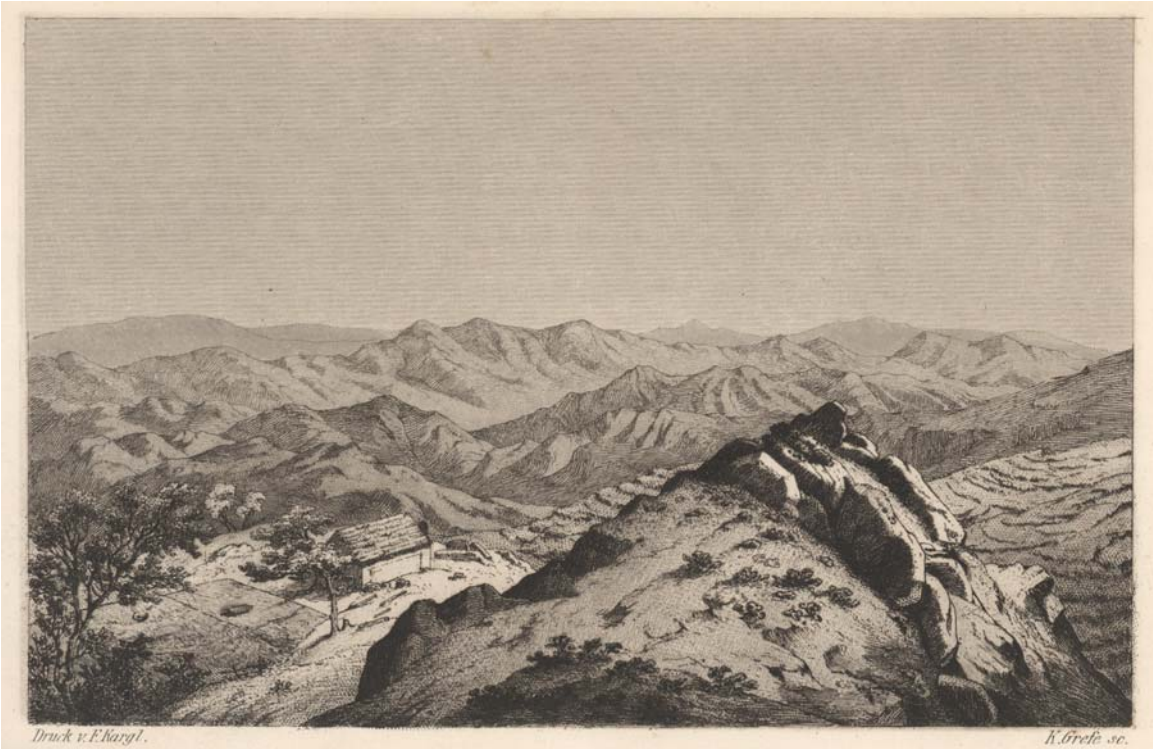


Figure 3.1. View from Prodromos looking west (Unger and Kotschy 1865)

Figure 3.2. Abraham Ortelius map 1573 (with detail)

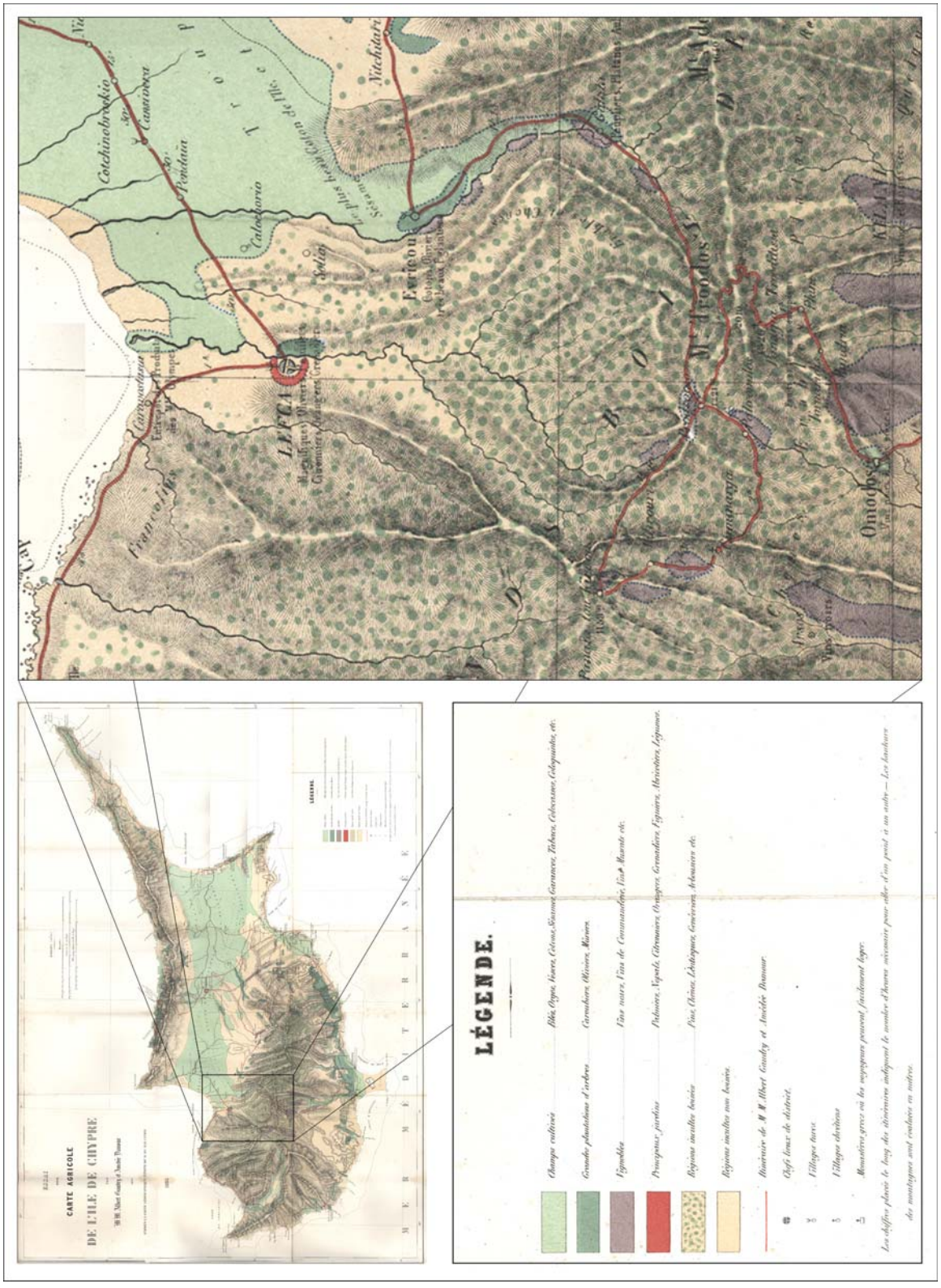


Figure 3.3. Gaudry and Damour map of Cyprus 1854 (with detail)

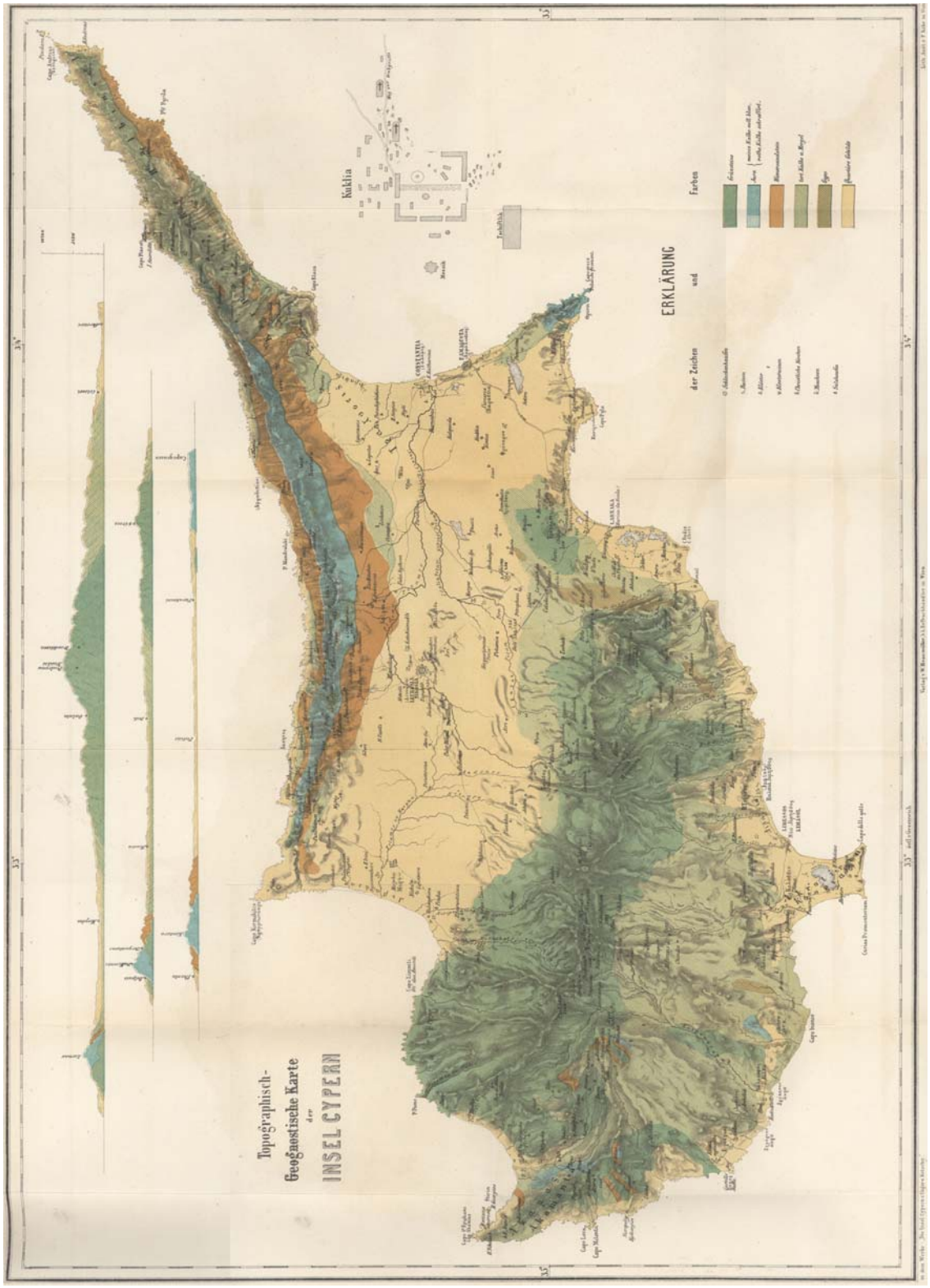


Figure 3.4. Map of Cyprus (Unger and Kotschy 1865)

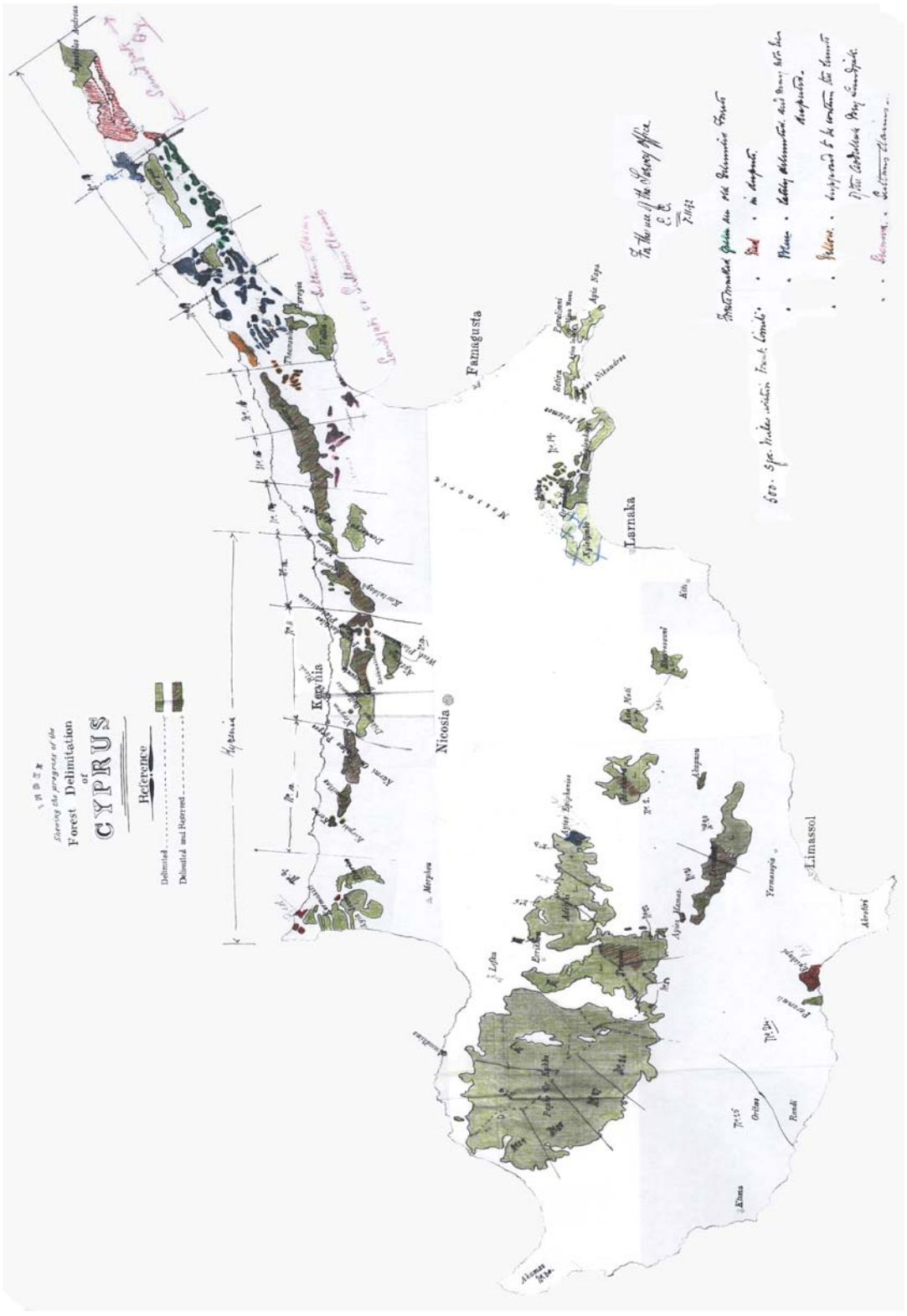


Figure 3.5. 1892 Forest Delimitation map (SA1/3470/1898)

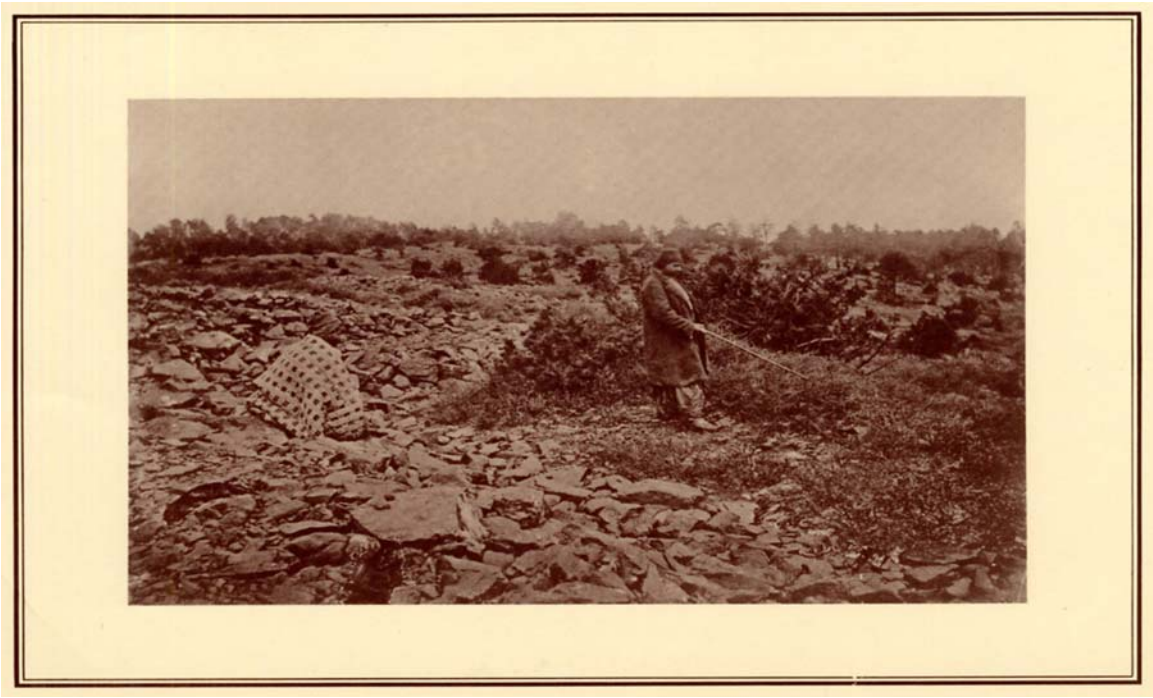


Figure 3.6. "Summit of Olympus" (Thompson 1878)

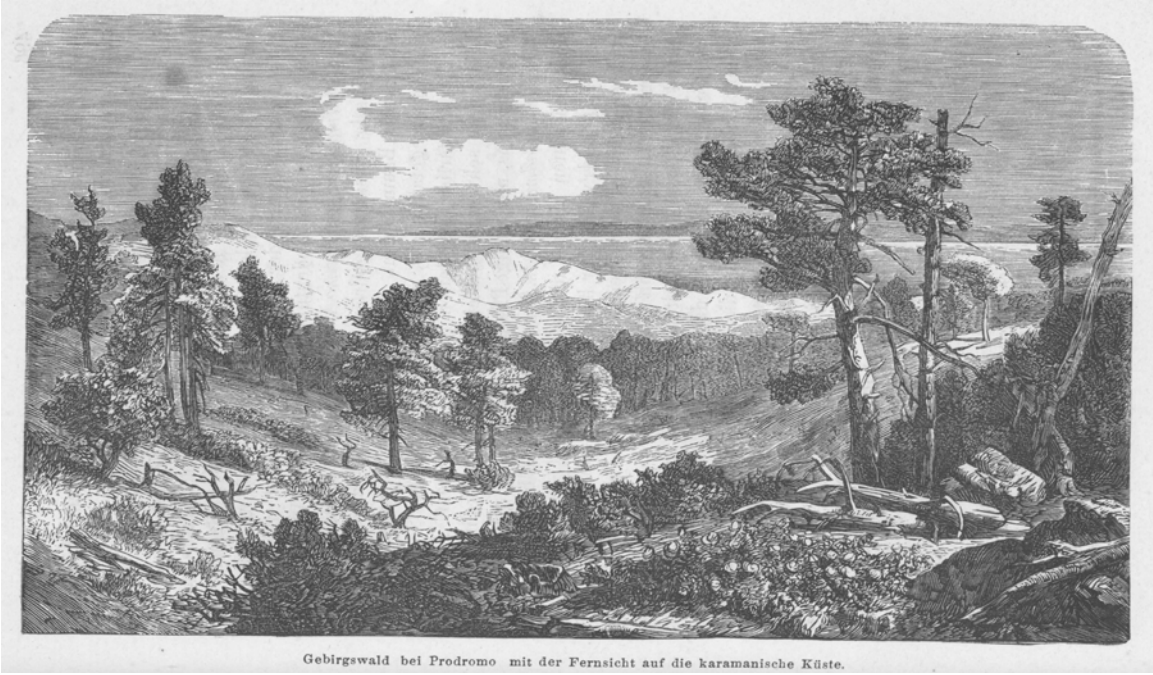


Figure 3.7. View of Forests near Prodromos (Unger and Kotschy 1865)

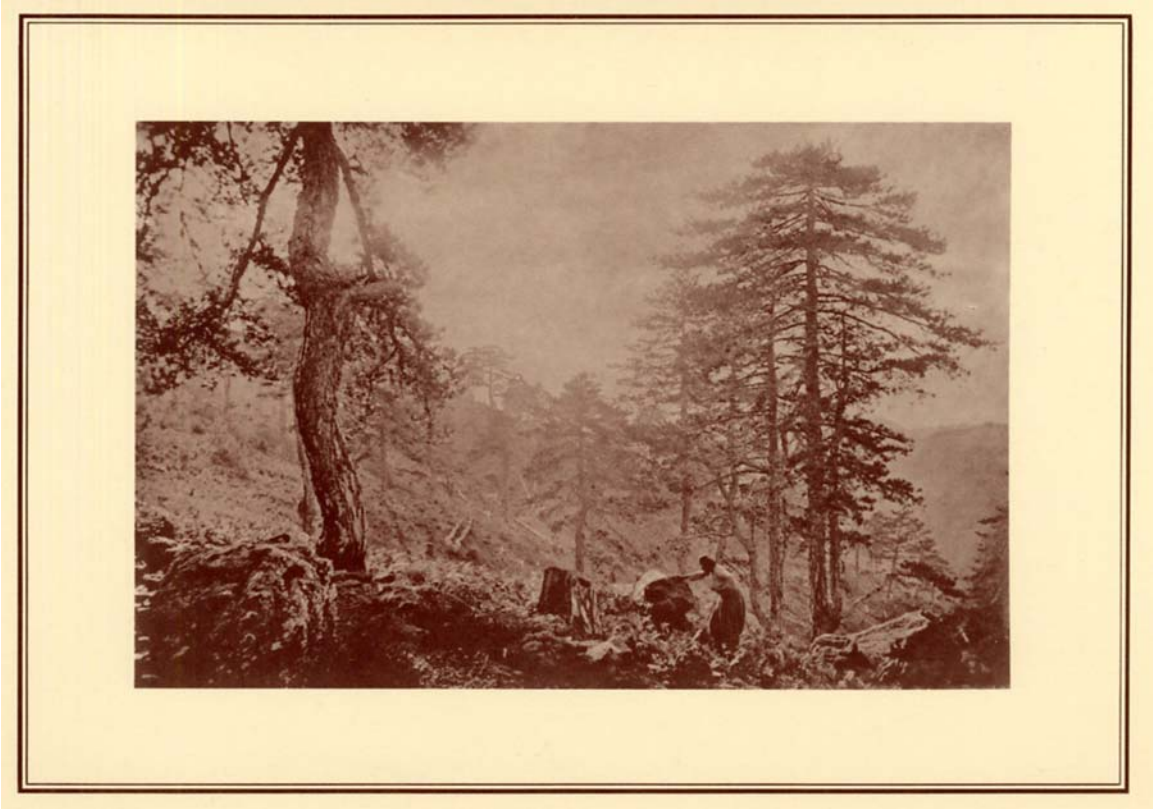
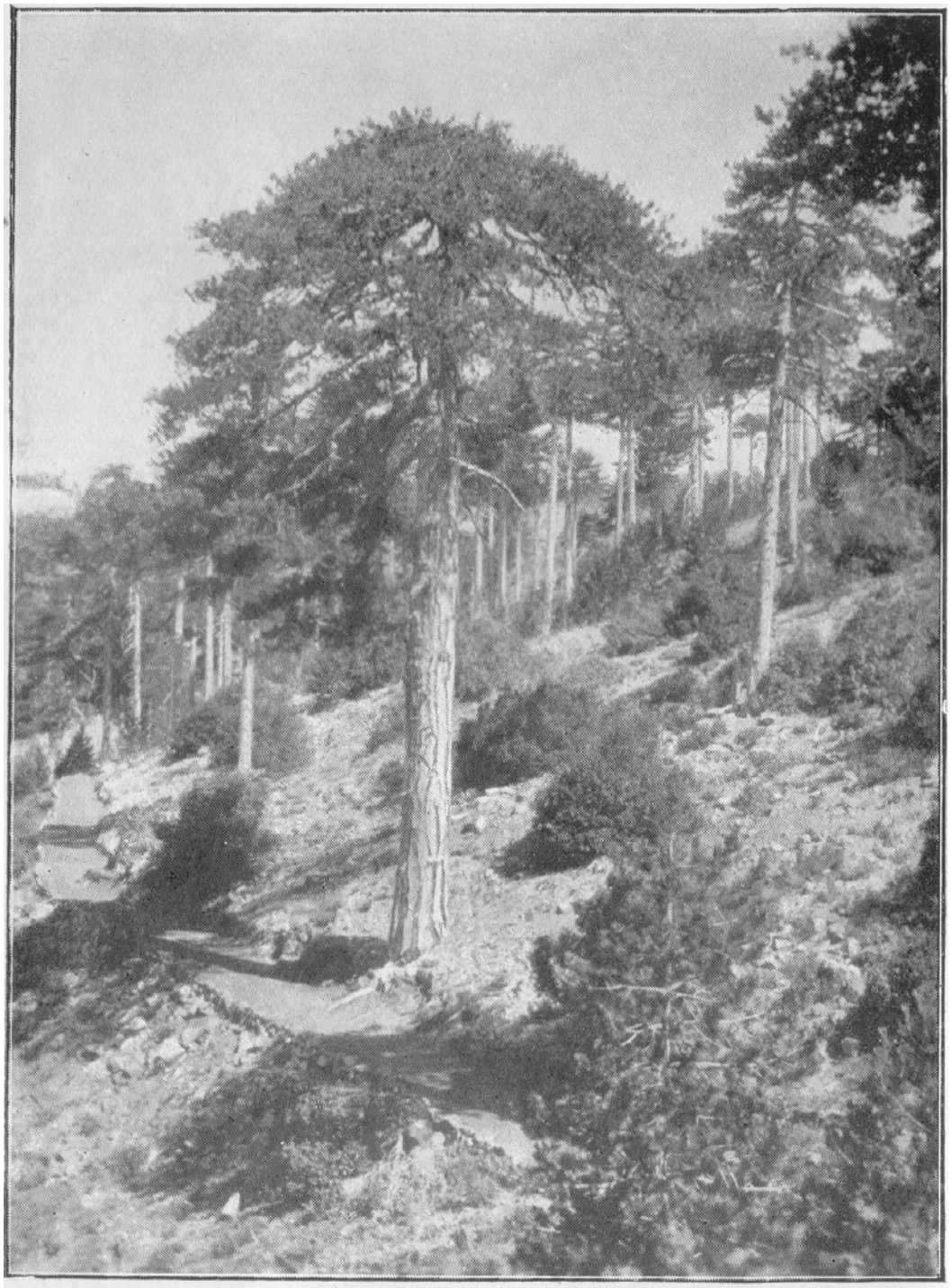


Figure 3.8."The Pines of Mount Olympus" (Thompson 1879)



To face p. 86.

IN THE TROÖDOS FOREST.
(*Pinus laricio.*)

Figure 3.9. A View of the Troodos Forest from the Handbook of Cyprus (1913)

Figure 3.10. Image of black pines in the Troodos Forest (Summer 2003, photo by author)

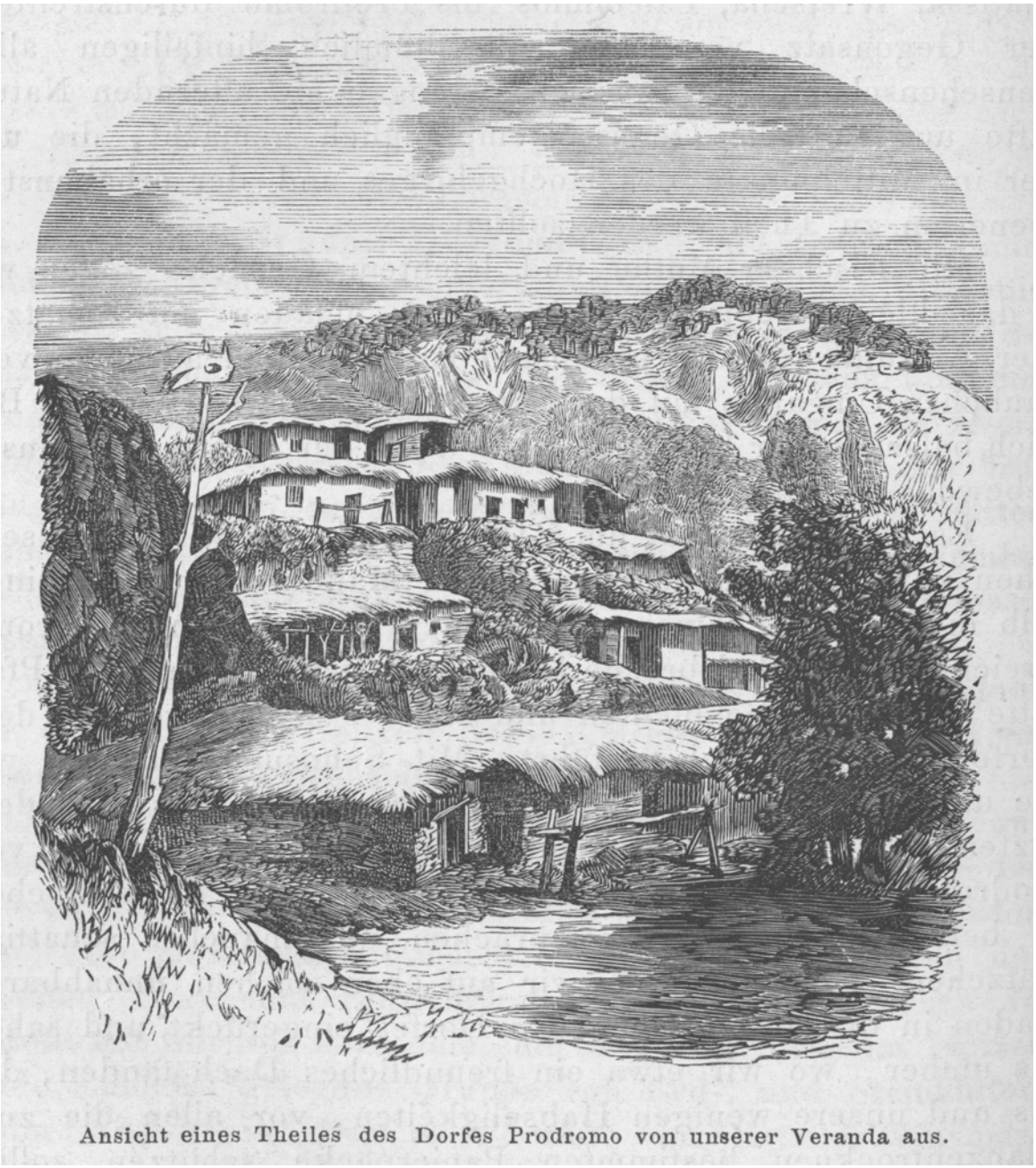


Figure 3.11. Houses of Prodromos (Unger and Kotschy 1865)

PART II: REINTERPRETING THE ENVIRONMENTAL HISTORY OF THE CYPRIOT FORESTS

To briefly reiterate the accepted history, it presents a patriarchal British presence arriving on a degraded island and slowly but surely recovering its natural resources by teaching its ignorant natives how to live in a less destructive manner. There were issues along the way, especially acts of forest destruction caused by unhappy shepherds, but in the end, the British knowledge and persuasion won the day. Implied within this history is the idea that all the British officials were supportive of the forest policies, as they all recognized the forests' importance, and that all Cypriots who utilized the forest as part of their livelihood did so in a destructive manner (e.g. their use of the axe for woodcutting was wasteful, their method of resin collection barbarous, their creation of vineyards was destructive).

How accurate is this story for Cyprus? In Part I, I provided information to contextualize the Cypriot experience as well as data to question the assumption that the island was degraded at the time of the British arrival. In this section I turn to archival and ethnographic data which specifically address the British colonial period and investigate the remaining aspects of the accepted story. What guides the British actions? Is it fair to lump together all the British officials into a general "Brit" with similar motivations and responses? Similarly, what guides Cypriot behavior, and can a general "Cypriot" be defined? What policies were employed in the supposed protection and regeneration of the forests and how were these policies developed? What is the relationship between fires, shepherds, goats, and forests?

Through the process of answering these questions, it becomes clear that the available accounts have frequently oversimplified certain aspects of colonial rule, or, in Gupta's

(2003) terms, have been too prone to place them in a black box. Thus, within Part II my study broadly serves two complementary purposes:

1. A richer description of the human-environment interactions concerning the Cypriot forests during the colonial period by critiquing the accepted colonial narrative.
2. A plea for the necessity of a deeper contextualization of the colonial process in terms of its functioning and its sources of power.

With these goals in mind, Chapter 4 offers a window into the British and Cypriot motivations and actions. Chapter 5 turns to a discussion of the process of delimitation, while Chapter 6 examines the role of the goat in Cypriot history. Finally, Chapter 7 focuses on forest offenses and the possible motives behind them. A timeline of the most important events within the British colonial forestry history, a list of abbreviations and definitions, and a discussion of other secondary sources who touch upon the forest history are provided as appendices (I-III) in order to help situate the reader in the topic.

Chapter 4: British and Cypriot Motivations and Actions

The accepted history presents a dichotomized picture of the intelligent, powerful British versus the ignorant, weak Cypriot. Further, it presents a history in which the forests are continuously recognized for their importance and forward momentum is always maintained in their protection, even in times of budget concerns. As the selections in this chapter illustrate, the actual history is far more complex than that history allows. For example, the British motivations for obtaining Cyprus and its subsequent history within the empire affect all components of the administration, including how its forests are protected and developed. The British are concerned about the forests, but not all to the same extent, and a distinction emerges as to whether the forests or the livelihoods of the mountain inhabitants should be given the most importance. Further, the Cypriots themselves are not all fully supportive of just one view of the forests. Despite any lofty goals of ecological management, how the forests are actually managed depends at times more on budget or personalities than a consideration of the ecological condition of the area.

SITUATING THE CYPRIOT COLONIAL EXPERIENCE

Memmi's work on the colonizer versus the colonized was an impressive and thought provoking work in 1957 (1965 English trans), and, as noted in Chapter 2, scholars have built upon his work to suggest a more nuanced colonial experience. Today there is a sizable body of literature discussing and explaining the colonial experience, and our understanding of colonialism has been tremendously improved in the past three to four decades on account of the general drive for postcolonial and subaltern studies. However,

one must still be careful to not blithely apply the same historical and theoretical frameworks to all former colonies without allowing for their unique characteristics. As scholars have pointed out in terms of colonial forestry management in India (see Sivaramakrishnan 1999, Agrawal 2005, Rangan 2000, among others), and as I will illustrate for Cyprus, the image of an autonomous, omniscient colonial state in which a strict separation of colonizer versus colonized was maintained, is not universally valid. Despite general proclamations from the home office and the interchange of reports, laws, and even employees and experts between colonies, the actual events within the colony depended as much on the combined local effects of individuals, both colonial officials and native inhabitants, and their ability to alter the far from monotonous colonial framework as they did on any generalized ideas of the "colonial experience". Policies and practices can arise, and indeed at times they did, out of a creative process, as opposed to a dictatorial process involving the powerful and the powerless.

This concept of multiple levels of identity and power within the popular starkly dichotomized view of the colonizer versus the colonized is especially essential to recognize in the context of Cyprus, as Cyprus could never be considered a typical colony. As is commonly mentioned, its role as a protectorate for 36 years and then as an annexed territory for 11 years before becoming a full colony had direct effects on its development. Those issues, along with the British motivations and ruling strategies in obtaining the island, are essential to understand in order to fully interpret the environmental aspects of the period.

The Effect of a Protectorate Status

The British obtained Cyprus through a closed door meeting in the summer of 1878 (June 4). Cyprus was to be held as a protectorate for the Sultan to ensure that the island

did not fall into Russian hands. For the British, the acquisition was thus a strategic one – by maintaining the island they could guarantee a military base along their route to India, to ensure that the Suez Canal remained open (see Lee 1931a, 1931b, Storrs 1945). By allowing the Ottomans to continue to claim a Tribute from the island, the British also ensured payment into the Franco-British Loan to Turkey in 1855. The continued payment of the Tribute by the island, even when it became obvious that it was a sizable burden, and its role in sparking political unrest and has been covered at length by various authors[1]. Thus, the occupation of the island served a large strategic interest, as well as a potentially smaller economic interest[2].

However, the island's strategic purpose was dramatically lessened with the acquisition of Egypt in 1882. The island's economic purpose was repeatedly questioned once the British realized that the Tribute actually sapped away a large majority of the island's revenue. As Burn (1936) notes, complete with a classic jab at the Ottomans,

> Neither Kellner [who wrote the Memorandum on the Revenues and Charges of Cyprus for the Five Years from 1873 to 1878] nor the Foreign Office had paused to consider that the Turks governed cheaply because they governed badly; and, in fact, even with its very modest programme the Cyprus Government was only able to pay both the Tribute and current expenses in three exceptionally good years (134).

In other words, the island could not afford the funds necessary to carry out the projects deemed necessary for it to fully develop (such as better roads, harbors, and even forests) out of its own coffers.

Monetary grants from the home office would have helped this situation, and indeed, there were random grant-in-aids over the first twenty years, but a fixed grant-in-aid did not occur until 1907-1908 following Churchill's visit, and even then, it was a partial

[1] See Hill (1952) as the source of much of the later accounts.

[2] Disraeli (Lord Beaconfield), the champion behind obtaining Cyprus, suggested that the British should obtain the island in his fictional work *Tancred* in 1847. Some authors have suggested that his actions in 1878 were guided by a romanticized desire to make his fiction real (Temperly 1931). However, as Lee (1931) argues and I have followed above, most authors point to the War Office and its strategic concerns as playing the largest role in the island's acquisition.

grant. The reluctance of the Home Office to financially support the island can be fairly easily understood within the context of the acquisition of Egypt, especially as some had doubted the island's importance since even the summer of 1878. The questioning of the island's occupation contained within the traveler's accounts (see Vizetelly and Donne in Martin 1998: 76-95; 180-205) serves as an indication of the amount of mixed feelings concerning the acquisition. The negative stories relayed back home by the first wave of unsuccessful business speculators (for a later appraisal, see Burn 1936, Hill 1952) certainly did not help the situation. The one point agreed upon by almost all, that the British could at least use the island to show the East how a proper government managed its possessions, also lost steam as Turkey did not show much progress in the modernizing reforms it had started several decades earlier. Further, the architect behind the acquisition of Cyprus, Disraeli (Lord Beaconfield) was replaced by Gladstone in 1880, so the island lost its main cheerleader.

Viewed from the critical eye of those in the Home Office, the above factors combined into a view that Cyprus was not worthwhile enough to be supported by the English taxpayer. The colonial office was informed accordingly by Fairfield – the island would be given moderate assistance from Parliamentary votes, but not big outlays. In Fairfield's words, the plan was to "...fix the establishment of the island on an efficient but somewhat parsimonious basis..." (Burn 1936: 134). This plan appears to have been followed for decades thereafter, and these budget constraints were strongly felt in the management of the island's forests.

Further British motivations and ruling strategies

Another unique quality of the island, with just as wide reaching effects as the budget concerns, must also be discussed. Herzfeld (1987), interpreting arguments made by Lang in 1887 regarding the level of science and intelligence in the 19th century, argues that "the

British mission in Cyprus [was viewed as being] less to civilize than to *restore*" (74). Why this distinction? Several points need to be outlined in order to explain this.

As mentioned above, the island was obtained as a protectorate somewhat unexpectedly in the summer of 1878 for largely strategic reasons. However, accepting the island as a protectorate also served an additional goal for some of the colonial officials[3]. For the majority of the classically educated British, the island was connected with Greece and Hellenism, and therefore with the cradle of civilization which the British and the Germans, in their bids for nationalistic power, had reconstructed and re-mythologized to guide and justify their own actions[4]. Thus, by taking Cyprus as a protectorate, not only were the British securing a strategic base for themselves, but they were also rescuing the remnants (no matter how slim those remnants might be) of the founders of Western Civilization from the Oriental hands of the Ottoman. In Philhellene thinking, this was the battle of the western civilized world against the barbaric east; as previously noted, the chance for the West, with its schedules and orderliness, to show the Eastern ruler how to correctly manage a colony, i.e. the arrival of blatant "Orientalism".

Unfortunately, there were roadblocks to this process. Turkey's sluggish modernization effort was one of them. Just as importantly, as Herzfeld has noted in several publications (for example, see 1987 and 2006), the classical background of the island created something of an identity crisis among the British officials. They perceived themselves to be the knowledgeable ones, with a duty to re-develop the island for the ignorant natives, but on another level the romanticization of Greeks within the British culture led them to

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3 It should be noted that in all likelihood, some of the officials may have had little concern about Cyprus' history – yet more evidence of the importance of studying events at something as minute as even the individual level.

4 Germany dominated the classics and archaeology scene by the 19th century, and many countries copied its educational system as well as sent students to study in Germany. A quote from the Minister of Education in Germany in 1806 clearly illustrates the stress placed upon Greek civilization: "Knowledge of the Greeks is not merely pleasant, useful or necessary to us – no, in the Greeks alone we find the ideal of that which we should like to be and produce" (Von Humboldt in Morris 1994:18).

view the Cypriots in a far different light than they might have viewed a South African native. Byron's involvement with the Greek War of Independence from the Ottomans and his death from fever in Greece, as well as Britain's role in claiming the Ionian Islands as a protectorate and subsequent relinquishment of them to Greece after multiple years of cries for enosis in the 1860s would have been incorporated into the development of their identity. In other words, in taking over the 'protection' of Cyprus in 1878, the British found themselves in a rather difficult quandary. They were to be the rulers of the people to whom they attributed the foundations of their own (in their minds, advanced) civilization, the very civilization that justified their colonial enterprise. They would be restoring civilization, not creating it.

The British adopted a number of ways to reconcile their actions on Cyprus with their conception of world history. One option was to repeatedly emphasize that the modern Greek Cypriots were a far removed link to the great and glorious ancient Greeks. As Gregory (1994) and Godlewska (1995) have convincingly shown for Egypt, by conceptualizing the natives as an essentially average group of ignorant peasants the British could justify their rule over them. Thus in Cyprus, according to British authors such as Lang (1879), the Greek Cypriot women were ugly and plain and bore no resemblance to Aphrodite. Moreover, the Greek Cypriots in general were dirty and unkempt and lazy, in other words, they were nothing at all like their famous ancestors.

At the same time, though, quite contrary to what one might expect if following an Orientalist reading, the British often said positive things about the Greek Cypriots' Muslim neighbors. The Turkish Cypriots were presented as being everything that the Greek Cypriots no longer were. The Turkish Cypriots were clean, hardworking and trustworthy, and the women were attractively shrouded in all white (Lang 1879). As an even more specific example, the Commissioner of Kyrenia during the first several years of British rule only kept Turks on his police force, for they could follow orders and were

more truthful, sober, honest, brave, clean, and reliable than the lazy and slovenly Greeks[5] (Scott-Stevenson 1880).

It appears that this characterization came about for a number of reasons. For example, it allowed the British to help reinforce a view of the Cypriot Greeks as only having a limited connection with the classical Greeks by providing something against which to compare them. If they were worse than Muslims, then they must not be the same Greeks as the ancient ones. Along similar lines, in the British mindset it seems to have been acceptable to rule over the Turkish Cypriots without downplaying their links with history. While they were representatives of the once powerful Ottoman Empire, they were clearly separate from the greater Western civilization, and the British rule over them was to serve as an educational example to the East as to how to rule its subjects. The equality and justice spouting British would hardly be doing themselves a favor if they treated the Turkish Cypriots harshly in this context.

De-historicizing the Cypriot Greek ancestry was not the only option followed in rationalizing British rule over Cyprus. The other primary approach utilized was to take an opposite stance and outwardly recognize their ties with the past. As a prime example, acknowledging the Cypriot ties with civilization and their former status as the creators of democracy, the British made the decision to give the Cypriots a greater say in their own government. By an 1882 law the Legislative Council, which had initially been a body of appointed officials, became a partially elected body – Hill's "toy parliament" (1952: 419, citing the words of an 1891 article within *Edinburgh Review*) – with nine Greek Orthodox elected members, three Muslim elected members, and six appointed British members. Although the wisdom of this action was questioned both by contemporary authors (see Sinclair 1926) as well as by later authors throughout the years (Burn 1936,

[5] This preference for Turkish Cypriot police remained in play for many decades, as by 1914 there were 468 Turkish Cypriot police as compared to 290 Greek Cypriots (CO 537/24). I should also note that much has been written as to the role this preference may have played in the troubles of the 1950s.

Hill 1952), it nonetheless still illustrates that just as Cyprus' unique past could at times result in the creation of a negative view of the Cypriot Greeks, at the same time, that unique past could also result in a far greater potential for power and altered ruling strategies than many other colonies.

The Cypriot View of British Rule

The above paragraphs deal with issues surrounding how the British conceptualized Cyprus. However, it is also important to consider how the Cypriots conceived of themselves. Whether as a result of the earlier British and German re-imagining of world history or whether as an indication of the Cypriots' persistent ties with their past, the Cypriot elite (many of whom were educated abroad) firmly saw themselves as linked with the grand Greek past[6]. Therefore, they duly welcomed and recognized the British as their saviors from the yoke of the barbaric East within this great narrative of West versus East. They viewed the British occupation as a large step toward becoming a fully functioning, civilized, western nation, although for many of the political and religious leaders the end goal of this modernizing journey was for the island to be joined with its "motherland" Greece[7].

[6] One could spend some time discussing the relevance of Western or British hegemony in convincing the modern Greeks of their role in this depiction of history, but that is outside the scope of this discussion.

[7] See Bryant (2004, 2006) as well as Katsiaounes (1996) for a further discussion of the contesting narratives at the time of British occupation. Bryant (2006) argues that both the Greek Orthodox Cypriots and the Muslim Cypriots presented themselves as "civilized", as something separate from "Asiatics or Africans" from the beginning of British colonial rule. The Greek Orthodox Cypriots made this claim by associating themselves with a lineage as the founders of Western Civilization, and the Muslim Cypriots made this claim first by drawing upon an Ottoman counter-ideology which posited themselves as being deliberately different from the British, and then by drawing upon Ataturk's modernization policies intended to match the Turks with the West. To illustrate these claims, she cites an 1889 editorial in the Cypriot newspaper Alitheia, which is worth repeating both for its illustration of identity as well as its illustration of how the Cypriots understand the motives of British rule "The Cypriots, being most Hellenic in their ideas, could not of course bear that the English, who have occupied their Island as saviours and profess to render its administration a model for the rest of the provinces of the Ottoman Empire, should govern them as a conquered country inhabited by Asiatics or Africans" (2006: 48).

The Cypriots' understanding of their past would have important impacts not only in terms of politics, but also in terms of the environment. The Cypriot elite view of their role in the origins of western civilization, as well as their perceived rightful status as members of the western world, a status which the British were to help them achieve, combined with their outside education and ties, will be seen in the stringency of their protests at the island's environmental management. In their eyes, Cyprus was a western nation, and it should therefore be ruled as one.

The education of the elite and their ties abroad had impressed upon them the popular concerns regarding the role of forests in connection with the climate, especially water (as discussed in Chapter 2). The statements of the colonial foresters and even several of the High Commissioners only served to re-emphasize their views on this matter, as did the repeated attempts of the colonial government to find sources of water by employing water-finding experts, although to largely no avail. In the generalized manner in which these concerns were applied in a policy setting, trees could bring water and water was massively desired. As the elite understood the situation, if the western nations recognized the importance of forests and water[8], and the British-hired foresters themselves recognized the link, then why was the colonial government not following through with these progressive ideas and doing more to increase the number of trees on the island? Thus, the Cypriot elite, perhaps contrary to expectations, spent the better part of the decades leading through the early 1900s complaining that the British were not protecting the existing forests and planting new forests to a great enough extent. In essence, the elite were already behaving along the lines of western environmental thinking – they were expressing concerns which the West had taught them, and by most measures, the British

[8] Although, following Grove (1995), the British recognized this importance more in their colonies than in their own country.

should have been happy to have had such a supportive populace in terms of environmental concerns.

However, the British were not happy with this early elite pressure. To understand why, one must further situate the Cypriot experience within this complex background. The remainder of this chapter is devoted to further developing our understanding of the general colonial environmental experience on Cyprus, with special attention paid to the roles of individuals within different time periods of this broader picture. Chapters 5, 6 and 7 will continue this general theme, although Chapter 5 will look more closely at the legal questions behind the delimitation of the island's forests, Chapter 6 will focus more specifically upon the role of the goat within this setting, and Chapter 7 will examine the causes of forest offenses.

EXPLORING THE ENVIRONMENTAL HISTORY

Three key periods in Cyprus' forest history are highlighted below: the period from 1878 to 1885, the period from 1885 to 1895 and the period from 1921-1936. These selections clearly illustrate that the importance of individuals cannot be over-stressed, and further that there is not just one representative "British" voice and one representative "Cypriot" voice enunciating the concerns and motivations of each group. Rather, there are multiple voices, both British and Cypriot, and these voices illustrate a nuanced situation of multiple goals and motivations.

Exploring the Environmental History: 1878-1885

Early Legislation and Inauspicious Beginnings

The accepted history states that when the British arrived, they found a decimated forest which largely reflected the work of a population accustomed to using this forest as a free-for-all with no concept of forest preservation. Hordes of goats, shepherds with a

penchant for starting fires, and woodcutters had been singled out for blame. That environmental story of degradation, as seen in Chapter 3, appears to be a "pseudo-history". Nonetheless, the majority of the British officials believed the environmental history which they did such a good job of propagating. With little knowledge of the past environmental state of the forests, they thought they saw degradation. This idea of degradation was rarely if ever questioned by the British or the elite Cypriots themselves (i.e., ones who would have had access to newspapers, or contributed to newspapers, or even served as the editors of the newspapers).

Faced with this description of degradation and the common belief that more trees would bring more water (and less trees, less water), it did not take long to begin work on the forests. The first eucalyptus seeds arrived in 1878 (SA1/1840), around the same time as the arrival of a forester seconded from India to assess the situation. His name was Wild, and he would stay three months over the winter of 1878-1879[9]. He presented a picture of widespread destruction and recommended planting eucalyptus seeds as well as practicing a system of clear felling in areas with older stands[10].

Most of the eucalyptus planted yet in 1878 in the towns of Nicosia, Larnaca, and Famagusta died by the end of the cold winter of 1878-79 (SA1/1840), perhaps while Wild was still present. However, his narrative of degradation had a more lasting effect, and the first legislation concerning Cyprus was passed on April 21, 1879, the Woods and Forests Ordinance, Law No. 22. This law contained thirty eight sections, but its main purpose was to provide the High Commissioner with the power to "declare the whole of

[9] A fuller summary of his report is contained within Appendix IV

[10] As an indication of how environmental thinking can alter over the years, by 1917 eucalyptus was disliked on Cyprus except for draining swamps (SA1/1055/1917), while by 1969, the benefits of eucalyptus in industrial plantations were once more being touted (Polycarpou 1969). Today of course, many scholars have rethought the wisdom of planting non-native trees such as eucalyptus to "reforest" an area. At this time, however, the concern was with planning quick growing trees for fuelwood as well as for their believed rainfall-inducing properties and for some of the colonial officials eucalyptus seemed to meet best those requirements.

any part of the forest land in Cyprus, exclusive of such as belongs to private individuals, to be under the protection, control and management of the Government" (section 4). People found carrying out prohibited acts on such land, such as removing sound timber; felling, cutting, lopping, tapping or burning a tree; stripping bark off of a tree; extracting minerals, stones, leaves, cones or other forest produce; burning lime or manufacturing charcoal, tar or pitch; setting fire without preventing its spreading; pasturing cattle; or cultivating the land in state forest areas without permission will be fined and/or imprisoned (section 6). As Kimberley, the Secretary of State for the Colonies, notes, this law embodies "to a great extent the provisions of the Indian forest legislation" (Corr. 1882, no. 61). Further, in its efforts to state the Government claim to the forests, it practically only recognizes the classes of State Forest or Private Forest, although the Ottoman Law also recognized evqaf and village forests[11] (Corr. 1882, no. 61).

However, as this new law desired to maintain the same rights as under the Ottoman period, it also contained a section allowing "customary usage" to continue within the forests. This section will become a point of contention in the following years. It states that "Nothing in section 6 shall prohibit the collection and removal of dead and dry wood, stools, roots, and trunks of dead trees or brushwood to be used solely for firewood, for use of the inhabitants of villages who have been accustomed to supply their wants in this respect from the forests in the vicinity of their village, or shall prohibit the gathering of shinia for personal use or the cutting of myrtle for the purpose of constructing well ropes" (section 7).

As a brief summary of some of the other main points of the law, it further specifies that those people who are accustomed to utilizing the forest in the manner above need to apply through the District Commisioner or through the Mukhtar (mayor) who would then forward it to the District Commissioner in order to receive permission to do so (section 9,

[11] The Ottoman Land Code will be further discussed in Chapter 5.

10). As for grazing animals, section 23 states that although the pasturage of cattle[12] is prohibited, it can be admitted if the Principal Forest Officer agrees. Those who desire permission to graze their animals should submit an application to the District Commissioner via the Mukhtar in March (section 24). If room is available, the shepherd will be issued a permit which he must keep with him at all times (section 25)[13]. If a fire breaks out because of the shepherd's negligence, the grazing permit will be rescinded (section 26).

Two additional Orders in Council soon followed. On May 9, 1879 an order was made prohibiting the importation of timber, charcoal, firewood, and lime into the towns of Nicosia, Kyrenia, Larnaca, and Limassol from August 31[14] (*Cyprus Gazette* 23: 25). Three days later, on May 12, a second order was announced prohibiting the use of wood as fuel for steam engines in the towns of Nicosia, Larnaca, and Limassol from July 31 on (*Cyprus Gazette* 24: 26). The colonial government certainly displayed their immediate concern with the forests, although they repealed the probibition of importing lime into towns on July 31 (*Cyprus Gazette* 32: 35).

The speed at which legislation was formed, experts arrived, and trees were planted present a picture of a British government in full control of the situation. Later discussions of these years certainly want the reader to think this as well. Thirgood (1987:91-110) devotes nineteen pages to the entire history between 1878 and 1886, skillfully passing

[12] Cattle in this setting legally included goats, sheep, and camel according to Law 22, the 1879 Forest Law. A court case in 1907 raised the question of pigs, as some villagers had been grazing them within parts of the forest land and argued that they could not prosecuted as they were not included within the legal definition of "cattle". The villagers won their case in court, but over a decade later (1921), an amendment to the law was passed under Unwin's administration stating that it was illegal to allow pigs to graze in the forests (SA1/3595/1907).

[13] The law is written using solely male pronouns. It is unclear if this is strictly convention, or because the officials do not think there are female shepherds. There certainly were female shepherds, even though as late as the 1930s there still were colonial officials who were confused about this point.

[14] This order is cancelled as of February 15, 1883 (SA1/2052). Interestingly, at the time it is cancelled, Collyer (the QA) notes that E. Bovill (the previous QA) had stated that he always considered it to be illegal.

over the topics of confusion and concern that one can find in archival files. Allowing for these early nuances is one of the first steps to more fully understanding the period.

A report from a "Special Correspondent" for the Illustrated London News in 1878 starts the process of presenting a less organized picture.

> Another blunder is that which I learnt at the Consulate before starting for here. The Commissariat here are buying up firewood for fuel in large quantities at what is considerably above normal market rates. Well, it now appears that this firewood is all obtained from the extensive Government forests and property on the mountains to the north of the island, and so the English Government has actually been buying its own wood at an exorbitant price; and not only that, but the forests, which are valuable, are being destroyed for this purpose, and within the last two months more damage has been done in the way of disforesting and devastating the few remaining woods still existing in the Kyrenia and Carpas districts than had been accomplished in a decade of years (Sept 2, 1878 by special artist and correspondent).

Regardless of whether this particular account is fully true, it does allude to the disorganization of early colonial rule while at the same time suggests that the Northern Range forests may not have been as degraded as the early foresters describe. Several other documented examples show that the early years of colonial rule did go through some predictable hiccups. In the case of the forests, these hiccups frequently centered upon the question of priorities: was it more important to preserve the forests and even re-afforest the plains, barring all costs, or was it more important to maintain a low budget and perhaps a happy populace?

The Arrival of Madon

Stymied at attempts to acquire the services of a British forester from India, the Cypriot colonial government instead hired Paul Madon to become the first director of the newly created Forest Department. Madon, who was French and had worked in both France[15] and Algeria, is appointed as Principal Forest Officer on March 27, 1880 (*Cyprus Gazette*

[15] In the Region de Feu, or Maures, as the chief of the fire service (1874-1877).

1879-1884). He was familiar with the ongoing concerns within forestry which were based upon the continental forestry model and often seen in India as well as presumably Algeria, namely the concerns with shifting cultivation, or "fitful cultivation", fires, and animal grazing, especially goat grazing. Within a short amount of time after his arrival, he had attributed the demise of the island's forests to those three evils and coupled them with a general dislike and/or distrust of the mountain inhabitants.

Based upon these beliefs, Madon begins work surveying the forest and developing a management plan for them. His mandate was to set up a Forest Department with rules and laws (when necessary) designed to best utilize the forest, both in terms of exploitation for revenue as well as in terms of protection for its indirect values. Differing slightly from some of the later foresters, Madon places less emphasis on the exploitation aspects than on the protective and restorative aspects, and he argued that the actions requiring the most immediate action would be the delimitation of the forests and the regulation of pasture[16] (SA1/1837). Despite Madon's exasperation with the Cypriot natives (his description of their refusal to aid in fighting a forest fire has frequently been cited as an illustration of the Cypriot character (SA1/2140)), and despite his contempt for the goat, his reports do present one of the most contextualized views of the Cypriot forests until the 1940s. Unfortunately, many of his ideas did not come to fruition, as his work was hampered by the increasing lack of funds, disagreements as to how much the Cypriot peasant could be expected to change his or her lifestyle, and, ironically, something as simple as the lack of a good French translator.

Turning first to the logistical difficulties Madon faces, an overview of the steps necessary to publish a set of regulations for forest guards after he transfers the control of them from the District Commissioner's office and into his own office provides a typical

[16] This should not be interpreted to mean that he was solely concerned about the indirect benefits of forests. Rather, his efforts were centered upon building up the forest stock, so that a later forester could then successfully work the forests for timber exploitation.

example of the amount of red tape in the young colonial government (SA1/2093). Madon writes the regulations in French in early June, and it initially takes over a month to have them translated. Another month passes with no action, until the High Commissioner (HC) notes that the translation is unacceptable. The report is sent to be retranslated, and then it makes its way to the Queen's Advocate (QA) for his opinion (it is early August 1880 by now)[17]. The QA (Elliot L. Bovill) replies within a week with several comments, the comments are forwarded to the PFO, the PFO responds, and then the HC, via the Chief Secretary (CS), and the QA discuss points again, and the cycle repeats itself once it is sent back to the PFO for comments. Finally, on March 19, 1881, practically nine months after Madon forwarded the regulations he is provided with a final draft for his approval (SA1/2093).

This example is not unique. In another lengthy case regarding the fees associated with forest produce necessary to construct water wheel wells in which far more people were affected, the translations are so poor and so alter the original meaning that Madon finally has to resort to drawing diagrams to illustrate his points. The area in which there is the most confusion in this case regards the translation of tree species names between Greek, English and French. Since Madon is arguing that branches from one type of tree should be allowed for free, and the other should be charged a fee, it is important that both sides are talking about the same thing (SA1/1834). The situation does not improve over the course of Madon's two year stay and it is not just limited to local correspondence, as even later authors such as Hutchins (1909) complain about the poor quality of the translations of the reports that Madon sent to the Secretary of State for the Colonies[18].

[17] The handwritten notes concerning the issues with the first translation can be illustrative – for example, the translator at one point translated Madon's statement that the "noms" of the forest guard should be written as that the "full Christian name" of the guard should be recorded. This translation is crossed out, with a note on the side stating that the Turkish have no Christian names.

[18] Although in the above case, plant names were creating the most problems for the translator, translators had issues with animal names as well. In a case from 1892, a district commissioner discovered that the translator had been confusing the words for "sheep" and "goat" in grazing petitions (SA1/2195/1892).

Turning to other issues Madon encounters on Cyprus, following the desires of the colonial government, he embarks upon a policy of afforestation of the lowlands, although he himself repeatedly advises the government to focus on restoring the forested areas before beginning any large scale afforestation projects. The Home Office, however, initially sides with the main government on Cyprus, and pledged £5000 in the 1881-1882 estimates to be used solely for afforestation efforts. Although eucalyptus experiments had already been unsuccessfully attempted on the island, these efforts were to be primarily composed of large plantations of eucalyptus on the Mesaoria. Madon had begrudgingly drawn up an account of costs for these plantations, but he goes against the general government opinion and strongly recommends that eucalyptus be used sparingly and with caution (for example, see Corr. 1881:93). By the time Madon makes his feelings public regarding eucalyptus, Thisleton Dyer at Kew has also been asked to survey the Cyprus information and states similar concerns about the widespread use of the tree on the island (Corr. 1881:107)[19].

The Home Office uses these concerns about eucalyptus as part of their justification to reduce the amount of aid they pledged by half, to £2500. Budget cuts in other areas as well indicate a larger trend of decreasing budgets which served to make people more strongly question their priorities. A comment made by the Auditor and Accountant General (O'Neill) while trying to determine what departments should receive the limited government funds reflects a lack of consensus among the officials on Cyprus about the importance of the forests. As O'Neill notes, it would be nice to have Kitchener and his team conduct a thorough survey of the forests. However, "as we expect no immediate revenue of importance from the Forests, + we do expect an increase of revenue from the Survey elsewhere" it does not seem wise to devote money currently to the forest. O'Neill

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Since goats were frowned upon and this period is characterized by multiple requests and refusals for grazing permits for goats, while sheep were viewed in a positive light, this is a large mistake.

[19] Later foresters might have done well to heed these early warnings about the tree.

repeats this concern when discussing whether the Forest Department should be granted money for roads or for sawmills. Since Madon had stated that it would take around twenty years for the growing stock of the forest to develop to the point that the forests could produce a considerable annual yield, he again argues that no money should now be placed in the forests since it will not be paying back that money immediately[20] (SA1/1837).

The afforestation and budget issues were not the only items in which the Home Office became involved. By the summer of 1881, the focus was the passing of Law 8, the Forest Delimitation Law, as well as on forest fires. Turning first to Law 8, it consisted of 13 clauses and its aim was "to make provisions for determining the limits of forests under the protection, control, and management of the Government". Clause 2 stated that all forest lands in the Island, except those that were private property of any person or body corporate, were under the protection, control and management of the Government and as such were "State Forests". Forest lands were defined broadly in Clause 1 to mean "all uncultivated land bearing forest trees, whether standing in masses or scattered about, or which is covered with scurb and brushwood which may serve for the purposes of fuel or for making charcoal or for any like use, and all land on which are plantations of young forest trees, grown either naturally or by the hand of man". Clause 3 provided that the provisions of the Woods and Forest Ordinance of 1879 would apply to this law, including that nothing "in that Law or in this Law shall hinder any person from doing any act or exercising any rights which he might have been lawfully entitled" to do prior to the passing of the 1879 law.

Clause 4 of this 1881 law specified that further rights could only be acquired over state forests by government grant, while clauses 5 and 6 specifed how and when a

[20] See Fig. 4.1 for a graph of the Expenditure and Revenue figures of the Forest Department during the British period. As can be seen, the expenditure outpaces revenue for the vast majority of the British period.

commission to determine the limits of state forests should be created. Clause 7 explains that the commission must draw up a report describing the forest limits they have determined, that report must be placed with the district commissioner, and a notice must be posted in every village in the immediate neighborhood of the delimited area stating that the report has been deposited with the commissioner and that anyone wishing to object to the delimitation must do so within six months from the date of the notice.

Clauses 8 and 9 of the Forest Delimitation law then specify how to carry out an objection: any objections should be brought before the court as a civil action, with the Cypriot serving as the plaintiff; the decision can be appealed as with any civil case; the final decision is binding. Clause 10 reiterates that the delimitation will be considered binding and conclusive at the end of six months for all areas in which there were not objections. Clause 11 provides the steps necessary to charge someone with a forest crime under the 1879 law even if the particular area has not been officially delimited yet as State Forest. The District Commissioner is given the power to decide whether to press charges or not in these cases. Finally, clause 12 authorizes the PFO to cut timber within the state forests as he sees fit, and clause 13 provides the formal name of the law.[21]

Turning now to the forest fires, Madon had reported several times on the prevalence of forest fires, noting that they appeared to be set by shepherds to improve vegetation and other inhabitants to improve cultivation, as well as camp fires set by passer-bys and shepherds. He emphasizes that "malevolence is much less than generally believed"[22]

[21] As will be seen in later chapters, Clause 10 is never fully followed and Clause 11 does not prevent confusion from arising regarding how to deal with forests which will likely be delimited, but are not yet delimited. The definition of "forest land" also does not escape later commentators. Christodoulou (1959:110) notes that this law defined "forest land" so broadly that it led the Forest Department to include a good deal of "waste land and scrub", which really was not forest, but resulted in the necessity to spread the forest guards too thinly to cover all areas and and led to "endless friction and many prosecutions".

[22] As with the eucalyptus, later authors would have done well to follow his understanding of fire. Compare with Thirgood, who notes that the causes of fires were clearly identified, and these included "watch-fires, clearing land for cultivation, improvement of pastures, and intentional fires by villagers who resented the forest laws" (1987:99). Thirgood is following Biddulph's 1881 summary of Madon's report to the Home Office (Corr. 1882: 16). Although slight, the change in wording between Madon's initial account and the later accounts is still noteworthy. Madon takes pains to emphasize that while a few politically motivated

(SA1/2136). Although the fires were not malicious, nonetheless the forest still needed to be protected, and he recommends removing the shepherds from the forest, as well as making the village or villages near where the fires started assume collective responsibility. The legislation allowing for the delimitation of the forests would make these tasks much simpler, as it would put in place the framework for refusing access into a definable forest area.

As an indication of the importance of personalities, Madon recognizes that carrying out his suggestions, especially removing the shepherds from the forest, will cause discontent to a certain portion of the population, but he argues that this discontent must be overlooked for the entire island's sake and the "most enlightened portion of the inhabitants" understand and support this. He continues by stating that "At the present moment discontent is only shown in the district of Papho on account of the severe measures necessitated by last year's forest fires …. It therefore would perhaps be best to take no notice of such discontent, which is really only local and slight…" (SA1/2136). As noted before, Madon does not think that the fires represent malice or anger at the forest policies, but rather "the careless customs of shepherds, and especially … the numerous clearings of land for the planting of vines; the fires will also, for the same reasons repeat themselves this year, unless preservative measures are taken in due time." The issue is the "indifference and negligence" of the villagers, rather than a vested interest in malice towards the government (Corr. 1882: 115).

The Earl of Kimberley, however, interprets the forest situation in a slightly different light than Madon. Kimberley is concerned with protecting the people's livelihood and keeping the people pleased. As will be discussed further in the following chapters, he thinks that the villagers have a legitimate complaint when it comes to the Forest

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fires may occur, they are the exception, rather than the rule. Biddulph's summary, whether purposeful or not, loses that distinction, and sets in motion the typical description of politically motivated fires that so many follow today.

Department and its laws, and that this is true for more than just the small number to whom Madon alluded. He urges the department to tone down their efforts. Biddulph follows his suggestions and consistently refuses to approve almost every environmental action which could upset the general population for the remainder of his time as High Commissioner. However, he appears to be doing this as much for political reasons as for agreement with Kimberley's concerns, since he also suggests that Kimberley misunderstood Madon's points regarding fires and livelihoods (Corr. 1882: 114-115).

Madon is not swayed by Kimberley's argument, as he remains convinced that only a small number of people were unhappy with the forest policies, and inconveniencing that small number was acceptable for the greater good, i.e. healthy forests. No further disagreement occurs between Madon and Kimberley, however, as Madon leaves the island in 1882. Although he had always planned to stay just a short time, his departure can be specifically attributed to a lack of funds to conduct forest work combined with his belief that the island did not need a trained forester until its forests were better recuperated and a felling system could be devised.

Thus, by the time Madon leaves, the Forest Department has two pieces of legislation, one of which declares that all forest land which is not private is state owned and the other of which provides for the delimitation of that land. He also began planting trees around towns and marshes in order to provide fuel wood for the towns as well as drain the marshes for sanitary reasons, tried to protect the main forests from further destruction, and had already raised the ire of the Cypriots to such an extent that the Home Government recommended that the local government back down from its actions. The Forest Department's initial dreams of full financial support from the Home Office had been quelled, and members within the government openly questioned the fiscal logic of

investing money in the forests since they would not return the investment in the near future[23].

Dobbs, Indian experience and goats

If the government wanted to back off of the forestry issue as Kimberley had recommended, they chose the wrong person by bringing in E. Dobbs from India to replace Madon. Dobbs was a master of employing the "crisis narrative" which earlier travelers, especially Loher and Baker, as well as forestry officials such as Wild and Madon, had developed and which still appears in writing today. The narrative stated that the forests were in a ruined state, and without drastic action, they would disappear, and with them would go the rain, and without the rain Cyprus would become just one more bare rock in the Mediterranean. The still overall lack of funds for forests (see Fig. 4.1) helped to sell his and the following foresters' narrative that more attention had to be paid to the forests. For Dobbs, the solution to this ruinous state rested primarily on following Madon's suggestions and removing the goats from the forest. However, whereas Madon understood that the process would take time, he, like Unwin some 40 years later, desired it to happen more quickly. The forests could not afford to wait, he argued.

Although Dobbs tried multiple times to develop areas reserved from goats (e.g. SA1/2088, SA1/97/1884, SA1/1240/1884, SA1/2370/1884, SA1/2846/1884, SA1/3084/1884), he met with opposition from Biddulph during the majority of his attempts. As previously noted, Biddulph seems to have taken some of Kimberley's suggestions seriously and therefore repeatedly responds to requests for enforced forest regulations by stating that it is not desirable at the time to raise the issue.

[23] The implications of this logic – that it is irresponsible to invest money in forests to build up a growing stock when the forests are not producing money themselves – leads to many difficult years for the department.

Dobbs leaves in 1885, but not before Biddulph finally allows him to realize his desire to form reserves, and also his desire to transfer the bulk of forest management to the District Commissioners, as was practiced in India. Biddulph leaves in 1886, slightly later than his planned 1885 departure, and before he leaves, he does illustrate his own views on the forest situation through a memorandum. This memorandum, which emphasizes the need to reserve the island's forests from pasturage, is discussed further in Chapter 6. Pasturage will prevent the forests from regenerating, he argues, and as the forests decrease, so will the rain, thus the forests are intricately linked with agricultural productivity, and a matter of concern for all.

Exploring the Environmental History: 1885-1896

Forest Limbo, 1885-1896: A General Overview

Whereas the first seven years can be associated with the fervent and frequent calls of troubled foresters to save the state forest lands (i.e., practically all forest lands on the island) by curtailing the "rights" of residents to almost all aspects of those forest lands through various laws and Orders in Council, the next ten years represent a severely reduced forest capacity with almost all efforts focused on delimitation. Thirgood (quoting Bovill 1915) refers to the period between 1889-1892 as "the days of poverty" and this does appear to be an accurate description, not only for the Forest Department but the government as a whole. The initial euphoric phase of governing this new colony has fully worn off into a realization that the costs of governing it are formidable. The agricultural crops are not as strong as they expected (a drought in the later 1880s does little to help things) and they are becoming increasingly aware that the Tribute payment, which they

negotiated with the Ottoman government upon accepting Cyprus as a protectorate, is a bit high[24].

For the Forest Department, this lack of funding can be seen not only in the PFO's statements, but also in the government's choice of PFOs and the general instability of the PFO position. When the majority of the Forest Department was merged with the District Commissioners in 1885, the position of PFO remained as a general manager of the forests on the island. In actual practice, the PFO's duties primarily centered around delimitation. Conveniently, the PFO also held the position of Director of Survey, and the Survey Department did remain intact. Thus, for all intents and purposes, the professionally trained forester idea of a PFO was replaced with a Director of Survey with land registration concerns, moonlighting as a PFO as well.

Neither Grant nor Bovill nor Law nor Young (all of whom either serve as PFOs or Acting PFOs during this time) are trained foresters, and it is noteworthy that the continual crisis narrative of the previous years is rarely put forward by them. Officially the importance of the forests (timber production and perceived climatic benefits) and the government's goals for the forest remain the same, but it is immediately obvious that new personalities are involved in the process. Whereas both Madon and Dobbs focused almost exclusively on the state of the marketable pines in their descriptions of the forest and argue strongly that the health of the forests is more important than the disruption that

[24] Some minute papers were written on the backs of extra passport applications (SA1/2105), apparently because the office was low on supplies of the typical paper used for the minute papers. The issue is addressed more directly in a file concerning the future government of Cyprus from 1887.
"Since the CO has had to do with Cyprus, the sort of idea which has underlain our action has been this: that we were to spend a moderate amount of money for some years on providing roads, wharfs and jetty accommodation, decent [text garbled] and the most necessary government offices – that we were to spend something also on preserving the forests or renewing them, and on improving the water supply; and that we were to encourage education a little, and provide the people with decent police protection, better law courts, and the sort of medical superintendence usually existing in Crown Colonies."
However, with the addition of the Tribute payments, there is no way that the island can afford to carry out these actions. Therefore, "the best thing to do, and perhaps in itself the most acceptable to the Cypriots, would be to give them internal self-government outright ….without money I see no other way of making both ends meet" (CO 537/23).

reserving them may cause to the Cypriots, this new group of forestry staff are not all as convinced of that reasoning.

The primary PFO during this period, Law, is actually fairly sympathetic to the local people as well as to the monasteries, the power and privileges of which Dobbs had repeatedly tried to reduce (see Chapter 5 for a further discussion). The new HC as of 1886, Bulwer, appears to share Law's sympathetic view, or at the least shares Biddulph's former concerns about stirring up popular discontent. Bulwer, more so than Biddulph, reports on the concerns and complaints he receives during his travels around the island and then forces the government to investigate them. Between Bulwer and Law, it would seem as though the local inhabitants and the monasteries should have had a reprieve from forestry regulations for a bit.

However, the personality type associated with the trained foresters is not completely missing. Portions of it can be seen in Warren, the CS from August 1879 to August 1891, still holds the view that the importance of forest conservation outweighs any negative side effects caused by disrupting the lives of some Cypriot peasants. Warren is perhaps best described as the quintessential colonialist. He cannot understand why the natives are given as much leeway as they are in terms of the state's resources. The government's role should be to ensure that the resources of the country are used wisely. Allowing these resources to be ruined (in reality or in perception) on account of uneducated native shepherds who are perceived as living in perpetual poverty[25] and are considered to be the dregs of most civilized societies makes no sense to him, especially as he is viewing them from the vantage point of his own summer house and property on Troodos. Instead, these people could be more beneficially employed doing something else and the government would be doing them a favor to force them to adopt a different livelihood. In Warren's

[25] According to one informant, pastoralism was actually more profitable than farming during the early years of British rule. I could not find sources to support or dispute this statement.

mind, there simply is no space for questioning the future or potential benefits of free-range grazing – it must be stopped, and the more quickly it is stopped, the more quickly the colony can beneficially develop.

On a more practical level is the question of how to define a forest, as the goal of these years is delimitation[26], and delimitation is being carried out by people who are not foresters. The colonial officials find their answer by falling back on legal definitions. Collyer is the QA during this time period, and it is his voice which is the final say regarding legal issues. For him, the law is everything, even if loopholes in the law necessitate not charging those whom he is convinced are guilty, or even it they require the state to allow activities which could be destructive to the forest[27].

Perhaps one of the Collyer's most important rulings concerns the legal definition of trees which were not included as state forest during the delimitation. Were these trees still the property of the state and therefore covered by the Woods and Forest law as they had been before the delimitation? Or did the process of marking out certain areas as defined state forests imply that the state forfeited its claim to any other wooded lands not so demarcated? The answer to this dilemma would have far-reaching effects, as the government officials themselves realized. If those wooded areas remained state forest land, albeit not demarcated, then the survey team in charge of demarcating the state forests could just focus on marking out the biggest areas and not worry about trying to create boundaries which included oddly shaped or outlying small areas. They could rest assured, knowing that if a forest offense were committed in a forest area not specifically

[26] Chapter 5 contains a more detailed analysis of the delimitation process itself.

[27] As an example in the mid 1880s which clearly points to why so many of the colonial officials desired and requested the shift of the burden of proof to the person as stipulated in the 1889 law, a Paphos forest officer had arrested several individuals for stealing firewood for the forest. The men were found outside the forest, but each one of them admitted, when asked, that they had none of the necessary permits for collecting firewood. Regardless of their admission of guilt, it was decided that they could not be prosecuted, as following the law, which stipulated that the Forest Department had to catch them in the act within the forest, there were no legal grounds upon which to hold them (SA1/740/1885)

defined, they could still charge the person under the forest laws, just as they had been doing since 1879. If, however, the state forfeited its rights by not including the areas, then the survey team had to be especially diligent in demarcating everything which looked at all like forest land, or even like it could develop into forest land.

Collyer rules that land excluded from the state forests remains state land but not state forest land (SA1/2845/1884). Therefore, no forest offense charges could be brought against somebody committing crimes on that land, and further, there was no reason why the land could not be turned over for cultivation. The effect of this ruling is similar to what one might expect from the second scenario above – namely the survey team took special care to demarcate anything resembling forest land, even if no trees were present or the land was under cultivation[28]. The surveyors even returned to certain areas after this ruling to do a second delimitation to include areas which they had not bothered to include earlier[29]. As will be seen below, the end results of this approach (multiple small forest areas, some not actually forested) were criticized by many of the foreign forestry experts who traveled to Cyprus, as well as some of the staff on Cyprus itself[30].

Within this legal context, there are many files detailing native complaints and petitions. The Cypriots appear to adopt their own general view of the situation – if the overbearing British are going to restrict their wood collection from the forest, even their firewood collection, and create skyrocketing timber and firewood prices and real or at least perceived scarcity in timber and firewood, then they will need to get their wood

[28] See Fig. 3.5 for an example of this behavior, especially along the Karpas Peninsula.

[29] This behavior created many complaints (SA1/170/1892); as a specific example, the villagers of Eptakomi are said to have made a pact to "disrupt" the "new delimitation" via refusal to assist the survey team, as well as perhaps by firing certain areas under the belief that burnt timber would not be delimited (SA1/2523/1892).

[30] Although there are several cases of the government returning land which obviously should not have been delimited, such as a cultivated and irrigated piece of land owned by Kykko (SA1/3052/1891), or Bovill's multiple actions in 1896 and 1897 concerning land which he states without question should never have been delimited (SA1/1273/1895), these actions did not deal with the corrolary issue of delimiting village merras and hali land as forest with plans to afforest it. Thus, by the 1930s, it was estimated that 25 percent of all Minor State Forest land (i.e., scrub, brush land not located within the main mountain forest extents) could not be considered from an ecological standpoint (SA1/460/1934/1).

through other means. One logical means from the previous period had been to accept the initially free grants of wild olive trees from the forest areas that were given out to encourage the creation of a "tree culture" as well as to increase fruit tree plantations on the uncultivated lands primarily used as grazing grounds[31]. Instead of planting and grafting them, however, the residents would let them dry and then use them as ready sources of firewood. The colonial officials eventually realized this aspect and started charging for the seedlings, although seedling price did vary from year to year thereafter based upon the personality of the officials determining it (SA1/4009/1886). Was a fee necessary to make the Cypriots feel a need to care of the seedling, i.e. attach a value to it, or did the fee reduce the number of seedlings planted on account of the poverty of the people and therefore decrease the number of fruit plantations which could have been developed? This was the delimma facing the officials, one which they never answered.

In the meantime, petitions from the Cypriots continue to be sent as the delimitation proceeds. Some of these petitions illustrate the issues with making decisions based solely upon legal definitions regarding what could and could not be State Forests, as opposed to a recognition of which lands ecologically speaking should or should not be included in the forests. As Hutchins (1909) and Troup (1930) both later emphasize, just because an area could be claimed as state land does not mean that it should be claimed. As one example, stuck in the middle of the controversy surrounding the issue of wild olive seedlings from the forest are those people who had already grafted and were responsibly managing olive and carob trees which were included within the delimited forest. Far from being given permission to continue managing these grafted trees, they initially were told that they had no rights over them (SA1/565/1886).

[31] In Dobbs' view, olives were not productive forest trees, and therefore could and should be removed so that more productive pines could be planted in their place. Although he was concerned with the indirect benefits of the forests, his management strategies were therefore quite different than what one might expect today in terms of protecting forests for climatic influences.

In a specific case from Kyrenia, a man petitioned the government to allow him to graft several more trees among the trees that he had already grafted. The forestry reports mention nothing of degradation in the area, and the fact that they had delimited the area as forest implies that it appeared as forest land to them. That is, the native Cypriot had not done what native Cyprios are stereotypically described as doing, namely cutting down all trees on accout of an inability to understand their importance. Rather, the man seems to be been successfully managing the vegetation. One would think that this would be exactly what the colonial officials would like to see – after all, they had been giving away trees for free to try to convince people to take up this culture on their own lands. However, since the Forest Delimitation Commission did not define these trees to be on the man's own private property, his request was refused (SA1/556/1886).

The petitions also illustrate another aspect of the colonial experience. The Cypriots for their part appear to understand this aspect of the new "just" British rule[32]. The petitioners adopt these ideas of the importance of the legal system as well as the importance of the forests along with the associated language to try to obtain what they want. Alternatively, even if the petitioner does not understand or know the associated language, the petition writer and/or translator certainly does (SA1/2659/1884, SA1/873/1884).

To try to better situate the reader in this general atmosphere during the first several decades of British rule, I have provided several detailed examples below, which illustrate the importance of individuals and the ability of the Cypriots to make their voices heard for their own particular purposes. The first example concerns a member of the Legislative Council and a forest law, as well as the continuing complaints of the Legislative Council. The second example illustrates conflicts within the government itself as to what type of

[32] See Bryant (2004), Katsiaounes (1996) for a further discussion of the British presentation of themselves as bearers of fairness, equality, and democracy, rescuing the Cypriots from the corrupt Ottoman system through new objective Courts (1882 Courts law), the Legislative Council (1882 allowed elections, as opposed to nominations), and the Executive Council.

behavior is acceptable in the Troodos forests. The final example represents a less elite position and concerns a Cypriot tanner and his attempts to obtain a bark permit.

The Forest Law of 1889 and the Legislative Council

Thirgood (1987), evidently following Gordon's description of the Forest Law of 1889 as "a less important enactment" (1955:407), devotes little time to this law. However, in the context of the time period, and in the fact that this law was responsible for shifting the burden of proof onto the person possessing the wood (timber or fuelwood) to show that they held it legally, rather than keeping the burden of proof on the forest staff to show that the person possessing the wood had obtained it illegally, it is worthy of further discussion.

Also known as Law 12 of 1889, this law "For the Better Preservation of Forests, Trees and Plantations" came into force on April 27, 1889. It serves two main purposes, which it defines in eight clauses. Clauses 1-6 provide the framework necessary to allow any private owner to place his or her forests under the protection of the government. It states that any forest under the "protection, control and management of the Government under the provisions of this Law" will be considered to be a State Forest, subject to the same rules and laws as though which govern delimited State Forests. Clause 7, rather inconspicuously, shifts the burden of proof to the person in possession of the timber to prove that it is legal.

> When in any proceedings instituted under any law or regulation having for its object the preservation of forest, or when in consequence of anything done under any such law, or regulation, a question arises as to whether any timber or forest produce is the property of the Government, it shall be presumed to be the property of the Government until the contrary is proved.

The final clause, Clause 8, assigned punishment to "any person who wilfully and maliciously burns, strips the bark off, girdles, cuts, or uproots any tree or shrub situated on Government or private lands".

The district commissioners and the various PFOs all had been agitating for the shift presented in Clause 7 for years, and the question of changing the law so that it read this way had been discussed so often that Warren at one time notes that it has been discussed "ad nauseam" (e.g., SA1/782/1886, SA1/113/1885, SA1/489/1885). The first clauses allowing an owner to place forests under the government were also a welcome shift to the forest officials, as by doing so it meant that forest offenses could be filed against intruders into the small areas of private forest land as well, whereas previously the individuals could only be tried under general laws regarding damage to private property. Biddulph had refused to consider changing the law on account of concerns that the Legislative Council would be firmly against it, especially Clause 7. Now, although the shift of the burden of proof was buried in the next to last clause of the bill, nonetheless it was there. What had happened?

As Collyer (the QA) explains, "It has been considered hitherto impossible to amend the law in the manner required because of the jealousy with which forest laws have been regarded by Cypriots …. This year, however, an influential member of Council has become the possessor of a piece of forest land, in which depredations have since been continuously carried out, + the Law has consequently received the support of the elected members" (SA1/514/1889). That influential member of Council was Pascal Constantinides, a landowner educated in Beirut who practiced law (Coudounaris in Georghallides 1979: 436).

The realization that it was a Cypriot Legislative Council member who introduced and provided the impetus for passing this law, the very law that Biddulph had repeatedly not tried to introduce for fear of Legislative Council reprisals, makes this strict law rather

enigmatic. Adding to the complexity of the situation, a member of the colonial government, Law, the then PFO, as opposed to a Cypriot Legislative Council member, actually emerges as the strongest voice questioning the law's severity and whether it was wise to implement such powerful legislation. As Law notes,

> The fact is this, we passed last session a Forest Law which is as severe as any forest Law that I know of in any country, but that I think is all the more reason that we should be very careful to use with moderation the very extensive powers conferred upon us, otherwise we shall create great dissatisfaction with this law, very likely cause an agitation to be set up for its repeal, and further than this we shall furnish the strongest possible argument to the elected members of council for declining ever again to trust the Government with any extensive powers whatever (SA1/1513/1889).

Law was correct in questioning the wisdom of passing it, as new issues emerge between the Forest Department's interpretation of the law and that of the Courts. As long as Law is the PFO, the Forest Department does at least attempt to proceed with caution; similarly, for the courts, it depends upon the personality of the judges whether they adopt too strict or too lenient of an interpretation to satisfy the Forest Department. Complaints emerge about the District Court judge at Kyrenia who prosecutes everyone to their fullest but also bitterly complains that the existing laws are inherently flawed; he does not necessarily want to be so harsh, but the law structure allows him no other choice (SA1/1747/1893). On the other end of the extreme, the district court at Famagusta had already developed a reputation as being too lenient with offenders prior to the 1889 law (e.g., SA1/872/1888, SA1/1888), and it carried that reputation with it into the 1890s (SA1/2253/1891) to the chagrin of the Forest Department. As with the delimitation itself, the individual choices of the district judges regarding the island's laws remind us that just because legally something can be done does not mean that it will or should be done.

The complete reversal of stereotypical roles surrounding the passing and implementation of this law illustrate the power of the Cypriot elite to at least sway colonial legislation, if not directly alter it, and perhaps even for one's own personal gain.

Notably, another Legislative Council member, Mr. Liassides, who also introduces several bills dealing with reforestation, is said to own trees himself. The implication can be made that they both were looking out for their own interests.

However, it also appears that the Legislative Council, as well as some of the other Cypriot petitioners, either had accepted the colonial argument that trees were important for climatic reasons, especially their water inducing and saving capabilities, or, just as likely, were aware of the trend in forest management trends through their own education and contacts abroad. The Legislative Council addresses of the late 1890s and early 1900s further support the idea that the elite were firmly entrenched in the "forest conscience" which Madon, Dobbs, and even Biddulph had emphasized that they needed to adopt[33]. In fact, as noted earlier in this chapter, they had such a forest conscience, or at least an understanding of the main ideas in vogue in Western Europe at the time, that they criticized the colonial government for not doing enough to preserve the island's forests.

More specifically, the Legislative Council members urged for increased action in the preservation of the young forests, afforestation of non-forested areas (a return to the failed 1879-81 plans), and the allowance of grazing in older forests, as they did not think that the goat harmed mature forests[34]. Those requests were not that dissimilar from what the Forest Department itself desired, apart from the request for grazing in old forests. Even that request was not that different, as although the Forest Department still generally wished to remove all goats from the forest in order to ensure that all shepherds were

[33] For examples of their addresses, refer to the timeline at the beginning of Part II. Unwin and Waterer go back to beating this drum in the 1920s, 30s, and 40s.

[34] The Legislative Council members, as elected members, would have needed to keep their constituents happy, some of whom would have owned animals, as would some of the Legislative Council members themselves. A request for grazing in the old forests would gain support from both agriculturalists and shepherds. The shepherds would obviously be pleased with increased grazing grounds, while the agriculturalist, who may very well have owned animals too, would not need to worry about his or any other's flocks grazing in this fields prior to the harvest. (This topic is further discussed in Chapter 6.)

removed as well, they were most likely to compromise on old forests without young seedlings for the goats to devour.

The overwhelming irony in this situation, therefore, is that the elite Cypriots are agitating for essentially the same thing the British foresters would like to achieve. The financial ramifications of the island's protectorate status and the occupation of Egypt have managed to affect even Cypriot trees. The British foresters cannot meet the elected members' requests because of a lack of funds. Had the available funds for forest work continued to flow in, as it appeared for a year or so of the island's occupation that they would, then these complaints of the Legislative Council would likely not exist.

The extensive Legislative Council complaints regarding forests do slow down in 1912[35]. However, this is not because they and the government reach an agreement concerning forests, but rather because all of the Greek Orthodox members of the Legislative Council resign in protest that year over the Tribute, which they held as an even greater injustice than the forest efforts. When the Greek Orthodox members return to the Legislative Council following new elections in 1913, they behave in a much more subdued fashion in terms of their public addresses concerning forests. Further, with the advent of WWI, that island's relationship with Turkey takes center stage in many of their discussions.

To summarize the above example, the Cypriot elites (Legislative Council members) introduce and pass a bill which the British colonial government had been too hesitant to pass themselves out of fear for local reprisals. The Cypriot Legislative Council members are elected by local Cypriots, whose interests they are supposed to protect. However, it

[35] A railroad has been constructed on Cyprus during the first decade of the 20th century, and its coal burning steam engines tie the mines within the foothills of the Troodos Mountains with export facilities in Famagusta and Morphou (Radford 2003). Interestingly, the Legislative Council members complain about how slowly the railroad was contstructed, but not about the use of Cypriot timber in its construction. The archives dealing with forest issues are largely silent regarding this issue as well, and it appears likely that at least some of the construction materials were imported. The mines themselves utilized some Cypriot timber but as further discussed on p. 150, they depended heavily on imported sources.

appears that the Legislative Council members place precedence on their interests over those of their constituents (perhaps not surprisingly), hence the strengthened emphasis on forestry rules by those who owned trees themselves. The best case scenario is when they can make their interests seem to match both the British and the Cypriot audience, which their complaints about forestry efforts successfully do. For all environmental intents, the elite views concerning the proper environmental management of Cyprus differs only slightly from the accepted statements of environmental management being made British and French foresters of the time. The native complaints about lack of pasturage are represented by requests for grazing in old growth forests, but the council members successfully sidestep the point that their requests for the afforestion of non-forested area, usually hali, or waste land, would dramatically reduce the amount of pasture land available.

If the Cypriot government members are primarily looking out for themselves, who is looking out for the Cypriot mountain inhabitant, who does not agree with the westernized style of environmental management? As shown above, the personalities of government members play a large role in what happens, and both Biddulph and Bulwer actually appear to be better allies to the mountain inhabitants than many of the other colonial officials or Cypriot elite. However, it must be noted that their actions appear to be driven by a concern for legality and popularity (including maintaining calm), and not by any thoughts that the mountain inhabitant lifestyle might be sustainable. An example below concerning tree felling on Troodos provides a further example of these internal tensions within the actual practice of colonial rule.

Felling Trees on Troodos

Mr. Hutchinson, a British national hoping to make a fortune on the British acquisition of Cyprus, factors into quite a few of the early archival files regarding forests. Like any good British "capitalist" (he also had experience with land contracts within Turkey), he positions himself in many different business ventures, including timber supply and building contracts (as will be seen in this example), and bark (as will be seen in the example below). When he obtains the contract to construct for the government the Kilani Konak in 1884, he asks for, and receives, permission from Dobbs (PFO) to utilize fallen or dead timber from the Troodos forests for free.

Biddulph (HC) is furious upon learning that Hutchinson received Troodos fallen timber. Two years prior, in the spring of 1882, he had declared that Government works could not be constructed with Cypriot timber, and that any available timber should be reserved for the mountain villages (see SA1/3494/1884). The reason behind this ruling, and its continued existence over the next years, had been reports from Madon and Dobbs that the amount of available timber was low and that sources of sound, fresh standing timber must be protected at all costs. Biddulph's anger is heightened even more by the fact that in the years since 1882, Dobbs, in his attempts to obtain permission to reserve the Troodos forest from pasturage, had repeatedly presented an ever intensifying crisis narrative concerning the Troodos forest. It was said to be in such bad shape that finding a supply of fallen or dead timber for the mountain inhabitants[36] was almost impossible; there certainly was no fresh wood available for their use.

[36] Although not stated directly within the archival files, Dobbs' willingness to grant timber in a forest which he described in such a dire state either indicates that the forests were in a better state than he presented, or that he and Hutchinson had some business deal in place whereby it benefited Dobbs to provide him with supplies. Since Dobbs' negative presentation of the area is always contained within requests for reserve formation, one certainly should question how much of Dobbs' account of the environmental situation on Troodos is merely exaggeration in order to obtain his reserves.

Biddulph becomes even more upset, however, as he learns the next twist in the story – Hutchinson had received fresh timber, not dead or fallen timber. This was an even greater affront, especially to any Cypriot who found out about it, as the government had systematically been turning down the multiple petitions from mountain inhabitants begging for permission to cut fresh timber by using the excuse that the forest was in too fragile of a state (SA1/3494/1884). That a British national would be allowed sound timber in the same area in which Cypriots were told that no fellings were allowed was a public relations nightmare to Biddulph.

When called upon to answer for this chain of events, Dobbs attempts to transfer the blame to a Forest Officer. He argues that he had agreed to dry or injured timber, but never to fresh wood, and it therefore was solely the incompetence of the officer which had allowed this to happen (SA1/3704/1884). Biddulph is quick to question this story, as he points out that "There is obviously something not right here – dead trees are of no use for building, + such trees are not taken, as felling is going on. Speak" (SA1/3084/1884).

The testimony of the Government Engineer (who evidently was overseeing the project) further contextualizes the picture and certainly does not make Biddulph any happier. He argues that local timber, rather than imported timber, was specifically used so that the government could save money, as this was a government funded building. Even more, he notes that he was unaware that the PFO was under orders not to grant him fresh timber, nor does it seem right to him that the forest rules should apply to Government works. He states that he had been using perfectly sound Cypriot timber for government works within the Troodos for the last four years, and he sees no reason to stop that procedure now by either using imported timber or fallen or dead timber. As he notes, "I trust I need not be reminded that it is my duty to see that inferior timber is not used on government works" (SA1/4046/1884).

A typical account of colonial actions would consider that the Government Engineer's reasoning that government works deserve the best materials and that government engineers should not have to follow the same rules as the "hoi polloi" is completely normal, and that such a double standard is completely normal of colonial rule. However, as the Government Engineer's views go directly against Biddulph's rules from two years prior, this situation cannot be as easily described. It becomes even more difficult to fit into preconceived outlines of colonial rule when one also realizes that the PFO has been supporting the Government Engineer over the past several years, allowing felling to occur in a forest which he would be assumed to want to protect at all costs. One might suppose that this was just an odd occurrence, a chance event that Biddulph's instructions were broken, but they are not. Biddulph has to repeat to Dobbs his rules that no timber can be felled in Troodos in March of 1885 as well, during which time Dobbs feigns confusions over the rules. That the HC is more concerned about fellings in the forests than the PFO simply does not fit into the accepted narratives regarding colonial rule, although it does make sense in the everyday context of a business venture for the PFO[37]. This example and the one preceding it focused upon the behavior of colonial authorities. The example below provides a window into Cypriot actions.

[37] There are several repeated incidents of the main government either quelling the business ventures of the Forest Department or behaving in a more concerned fashion about the forests than the foresters themselves. Unwin in the 1920s and 1930s attemptes to sell Cypriot timber at reduced rates to the Cyprus Mining Corporation, which had purchased some timber from the Cypriot forests in the past. The government disallows the discount, and the Company itself states that it does not want Cypriot timber, as it prefers to import higher quality wood to meet its demands. As another example, during WWII the Governor of the island and the Secretary of State for the Colonies express concern at the extreme amounts of wood felling that had occurred on Cyprus as part of the war efforts, and they both decide to stop asking Cyprus to furnish timber, even though the war effort is still in need of it. The Conservator of Forests at the time argues with them that the forests can sustain more felling until the Governor decides to agree with him. It is impossible to know if the forests were damaged by the felling with the data available, but it is worth noting that on account of the extreme timber shortage, Cyprus had to force all residents to switch to the imperfect solution of fuel oil with a frequently impeded supply because of outside events during the war (SA1/1456/1939/2).

Bark, Foreign Capital, and Petitioning Cypriots

An additional example from the 1880s represents the experience of a Cypriot tanner in trying to obtain a permit to collect bark. The tanner does not completely succeed, but his decade long struggle represents the role of the individual, the initial disorganized nature of the early government including issues with the courts, the tension between capital development and respecting the Cypriots' rights, and the customary Cypriot behavior of being anything BUT the stereotypical silent and ignorant native. The fact that this example centers upon bark, a minor forest product financially speaking, only serves to further show the complexity of the colonial experience.

Soon after his arrival in 1880, Madon noted that the forests contained very little utilizable bark, and that it would be more money efficient to import it from Asia Minor (SA1/1837). Nonetheless, the Nicosia tanners were accustomed to obtaining bark from the forest, and in response to a petition from them, Madon issues permits for bark collection (apparently from oak and pine trees) soon after his arrival. By the next year Madon has refused to grant them any further permits on account of multiple prosecutions for not following the rules associated with the permit (e.g. only collect bark a) lying on the ground, b) on trees entirely cut and fallen, excepting such as may have been delivered to inhabitants by special permits, c) on stumps of trees previously cut leaving wood at least 3 ft above the surface of the earth. "The bark on standing trees, whether such trees are dry or not, may under no circumstances be removed" (SA1/2229). The tanners try unsuccessfully to argue that they themselves did not break the rules, but rather the laborers they hired to collect the bark were the guilty parties, but Madon will not change his opinion. The HC further states that they will never receive another permit while he is in office (SA1/314/1885). One would assume that Madon hoped that they would turn back to his initial suggestion to import bark, which was said to be cheaper and of higher quality.

In the meantime, however, the tanners see in the person of Mr. Hutchinson, the same Hutchinson as above, a likely ally[38]. They encourage him to speak with Madon on their behalf. As Madon continues to refuse to grant a permit to the tanners, even when requested by Hutchinson, the tanners then encourage Hutchinson to obtain his own bark permit "and manufacture and sell the prepared tannin to the tanners and that it would be a good affair for [him]" (SA1/314/1885). Madon provides Hutchinson with an annually renewable permit in March 1882, and Hutchinson's business of bark collecting and grinding is up and running. The business does so well that he opens a new factory in 1883 (SA1/314/1885).

Troubles start appearing in 1884, however, when several from the Corporation of Nicosia Tanners (also labeled the Corporation of Turkish Tanners) petition the government for the right to collect bark for themselves, and question whether Hutchinson's "monopoly" is fair. These petitioners accuse Hutchinson of inflating the price by more than two times over market value and also of mixing unclean bark into the bark he delivered to them. As they view the situation, "it would be incompatible with the principle of equality of which Her Britannic Majesty's Government is characterized, that such article [bark], the benefit of which is derived by the public in General, should be monopolized by an individual, and thus we should be oppressed under the paws of Mr. Hutchinson…"[39] (SA1/3954/1884).

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[38] Hutchinson was no stranger to the Forest Department at this time, as he had requested permission that same year (1881) for a grant of land and timber with which to build a sanitorium on Troodos (SA1/3442, SA1/3444). He was informed at that time that the question of leases on Troodos was still under discussion and that he would have to obtain timber from abroad, as island timber could not be used (SA1/3444). Despite this response, he still somehow manages to receive a permit for local timber (SA1/2163). The later weak excuse provided for this action was that the Woods and Forest Ordinance of 1879 and the Woods Delimitation Ordinance of 1881 both allow the government to permit felling with payment of applicable dues (SA1/3179/1884). Regardless of excuses, this action was not looked upon favorably by Biddulph, especially following the similar problem from 1884 discussed above.

[39] As previously noted, the Cypriot petitioners quickly realized the vocabulary which would most appeal to the British, in this case the question of "equality".

The government's response to this petition is varied. Dobbs (PFO) is especially unsympathetic of the tanners and is not overly concerned with how the government appears to the group of no more than fifty people employed between the only two tanneries in Nicosia at that time. He also displays a different opinion of Cypriot bark than his predecessor when he states that local bark (presumably from oak or pine) is better than that imported. In his opinion, Mr. Hutchinson provides a better quality product for a better value than what is available outside of the island[40]. He is "therefore of opinion that they have no reasonable complaint against Mr. J. Hutchinson." Further, Dobbs argues that it is also in the Government's best interest to allow Mr. Hutchinson to continue collecting bark:

> The income from the sale of bark is so trifling (under £15 per annum) and as immense injury could be caused in a single year to State property by a general license to remove bark from the forests; it behoves [sic] Government to make every provision so as to reduce risk of injury to the trees to a minimum, and this can only be adequately done by making one person responsible under forfeit of his right to collect the bark (SA1/3954/1884).

One might question whether Dobbs would apply the same reasoning were it a single Cypriot with the rights to collect bark, especially on account of his previous dealings with Hutchinson.

Collyer (QA) and Biddulph (HC) also state their opinions about the situation. They agree with Dobbs that Hutchinson does not have a monopoly, but they are also more concerned than Dobbs about making sure that the public did not view it as a monopoly either. Biddulph's temporary solution to the situation is that they should try to set a price for bark that would reduce the complaints of the tanners while also ensuring that Mr. Hutchinson could continue his business (SA1/3954/1884).

[40] The price of an imported oke is 35 paras. The price Hutchinson charges per oke is 37 paras. Before 1878 the price would have been closer to 22 paras an oke, but the prices both globally and locally increased since then (SA1/3954/1884).

Unfortunately for Biddulph's solution, by two months after the above discussion (Jan. 1885), Hutchinson's annual permit has lapsed and little progress has been made in developing an agreed upon price. This is because, for the Turkish tanners "the question as regards themselves is not so much one of the price of the article, but that they should have an equal chance with Mr. Hutchinson of acquiring the right of collection" (SA1/314/1885).

The government are not the only ones who misread the Turkish petitioners; Hutchinson also believed that "the question of price is in reality the pith of the whole matter", and he states that he has reduced his price to the lowest he can possibly allow. Further, since he only entered into this business at the tanners' request and with his own personal financial output, "I consider these services rendered to the tanners entitle me to continue to enjoy the position which I only undertook at their earnest solicitation and I ask of the Government such consideration for the outlay I have made as will give confidence to capital and enterprise…." Finally, as proof that his prices are reasonable, he points out that "more than one third or nearly half of the tannin business is carried on by the Greeks" and they are so satisfied with his business that the head tanner, Stylianos[41], has just signed a two year contract with him[42] (SA1/314/1885).

The government is now in a touchy situation: either they support the foreign capitalist, whom the PFO thinks is more trustworthy and better for the forests' sake, or they support the local inhabitants' rights to equality (in their definition), even though many of those

[41] Stylianos was also the lone Greek to sign the initial petition to the government from the Turkish Corporation of Tanners. When asked why he signed it if he was so willing to accept Hutchinson's bark, he states that he felt as though he had to sign it because he had dealings with them and did not want to quarrel with them (SA1/1280/1885).

[42] This file obliquely points to perhaps some tension with the British on account of their inability, or lack of desire, to follow some of the basic customs. The tanners had traditionally been Turkish, and they had fought to protect this status in the past (see Katsiaounes 1996: 41). They may have employed a few Greeks, as Stylianos states in this file, but they retained the full power. Although some of the British recognized this distinction, they evidently did not view it as that important, as they followed the policy that the tannery business was open to anyone (provided that it was not up-wind from them!). Thus, as can be seen here, a Greek run tannery is functioning within seven years of British rule.

same inhabitants had lost the rights in the past for breaking the law. A satisfactory answer is not found quickly and the petitions continue, addressed not only to the PFO or the HC, but also the Legislative Council.

The petition received by the Legislative Council serves several purposes. First, it provides a further insight into how the system of bark collection worked during the Ottoman period - villagers would collect the bark, pay the Government a duty, and then sell it to the tanners. Second, it also lends credence to the idea that perhaps the government is overly favoring Hutchinson, as the petitioners point out that the government is allowing him to use prison labor for cutting and grinding the bark (a point upon which Dobbs concurs, although several members of the government express surprise at hearing of this) (SA1/729/1885). Finally, it also ensures that the Legislative Council will get involved with this discussion (SA1/1280/1885). If Dobbs had hoped to be able to sweep the initial complaints under a governmental carpet, he has lost all hope of that now as the Council proceeds to focus on the inequality of granting Hutchinson the sole contract.

After approximately six months of stalling, the issue is partially settled. Both Hutchinson and the Turkish Corporation of Tanners are given a permit for bark collection in specific areas of the Troodos and Paphos forests in June of 1885. The government decided that even though they did not think a monopoly existed, it was still a large enough concern that the government could be perceived as allowing a monopoly to partially acquiesce to the tanners' requests (SA1/1280/1885, SA1/4627/1885). Once again one is reminded of the tangible influence the population can have on the government's proceedings.

The calm does not last long, though, as Hutchinson complains yet that year (late November 1885) that the Turkish tanners are behaving improperly. The tanners had been granted a permit to extract bark from the Government forests near Lefka in the

Marathassa valley, while he was given a permit to extract bark from the Government forests east of the Evrychou valley (Solea valley). The Turkish tanners, however, had employed at Periserona (about seven to eight hours from Lefka), one of Hutchinson's former employees as their agent in charge of handling the bark collection. Hutchinson states that the workers employed by the agent are lazy, and they take bark from the area of his permit, rather than from their area by Lefka. Further, the tanners are buying bark from men who are authorized to collect bark only for him, as well as from men who are neither authorized to collect bark for him or for the tanners (SA1/4627/1885).

Hutchinson's complaints fall on somewhat less sympathetic ears than they might have in the past. Dobbs is gone, and now Grant (Director of Survey) has also taken on the duties of PFO. Rather than blindly supporting Hutchinson as Dobbs had previously done, Grant suggests in the Minute Papers that Hutchinson might actually be incriminating himself in his complaints. As Grant reasons, Hutchinson is responsible for the actions of his employees, and if his employees are illegally selling bark to the tanners, then their criminal activities are his responsibility. More generally, he notes that Hutchinson's complaints are too circumstantial to do anything immediately about the situation. If Hutchinson can provide sufficient evidence of men removing bark without permits, then he will look further into Hutchinson's complaints (SA1/4627/1885).

Grant's views are also a bit harsher than what Warren (CS) would desire, and Warren softens them before sending the official response to Hutchinson. Warren also discovers that the forest officers and guards had not already been informed of Hutchinson's complaints nor have they been asked to carefully watch the bark collectors. This upsets him, as he notes in a minute to Biddulph that he can "barely believe" that the forest guards had not already been notified of this issue. Since it is important to insure "the full

benefit of Forest produce to the Revenue[43]" Hutchinson's rights need to be carefully protected and perhaps even the police could afford temporary assistance "if the forest establishment is too small to enforce the necessary care" (SA1/4627/1885).

Notwithstanding Hutchinson's complaints, the situation appears to remain fairly calm for several years until 1887. There are now four tanneries operating in Nicosia (SA1/1983/1887), and the same two permits have been issued for bark collection – one to Hutchinson and one to the Turkish tanners. However, the Greek tanners, who had signed a two year contract with Mr. Hutchinson with Stylianos as their head person, start agitating for their own permit to collect bark. They are told in response that all the available forest area is already granted between the Turkish tanners and Hutchinson, so they can not be granted a permit until next July at the earliest. In the minute papers, Law (the current PFO) questions whether it would not be easiest to drop the permits completely, as the revenue collected is "trifling" (£16 per year) and in general the bark permits have been a constant source of trouble and have led to numerous offenses, such as girdling trees[44] (SA1/1983/1887).

Despite another set of petitions from three sets of tanners within 1888 (the Turkish Corporation of Tanners, Mr. Hutchinson, and Stylianos Theodosiou and Co.), Law holds to his statement in 1887 that he does not want to offer any more permits. They have just been a hassle, and the Commissioner of Nicosia "is continually being annoyed and his time being taken up by complaints made by the grantees against each other and against each other's employees" (SA1/1973/1888). Stylianos and Co. send no fewer than three petitions during this year protesting this decision, starting in the Spring. The colonial office repeatedly promises to write him back but neglects to do so. By December of that

[43] Although fitting with Warren's personality, his concerns about insuring the full benefit of forest produce to the revenue are rather misplaced in this instance, as Madon, Dobbs, and Law noted that bark collection only yields a small sum.

[44] Cutting a strip of bark off of the tree to speed its death. There are also complaints that the Cypriots are girdling trees to create dry or dead wood which they then are allowed to gather.

year, Stylianos has become rather concerned, noting that if he does not receive permission to collect bark soon, he will be forced "to stop our work on account of your indifference" (SA1/1973/1888). As is apparent, Stylianos is not hesitant by this time to state his disapproval of the colonial action.

Stylianos finally receives a response from the government on December 27, stating that the government will not give him a permit, but that it will give a permit to the Corporation of Turkish Tanners, which Stylianos had been associated with in the past. Stylianos immediately replies, stating that his workers form their own corporation, so giving another corporation a bark permit with which he was connected in the past does him no good. He needs his own separate permit[45]. The following minute papers detail the preparation of permits for the Turkish tanners and for Mr. Hutchinson, although Law declares that this will be the last year that they provide them, as well as a brief discussion of Stylianos' claims. The officials determine that refusing him a permit, despite his frequent claims that a lack of one will bring him to financial ruin, is the correct course of action on the basis that a) he opted to receive his bark from Mr. Hutchinson previously, and b) he and his men have been brought into court for forest offenses related to bark collection in the past.

The saga continues into 1889, as Stylianos takes the bold step of petitioning the Secretary of State for the Colonies over this issue. He closes his petition by making the following points regarding the "fairness" and "equality" of the British rule thus far.

[45] Although the minute papers do not mention anything concerning ethnicity or religion, Stylianos evidently feels that this may be part of the problem, noting that, "I am not aware whether there is anything preventing a Greek from exercising this profession, so that Ottomans should be considered as a corporation of tanners and every Greek who exercises this profession be not considered as forming part of this corporation. I do not believe this is the case, so much so as at the Turkish time also I used to exercise freely this profession" (SA1/1973/1888). If this statement is correct, it goes against the commonly accepted history of tanneries in Cyprus, as noted in a previous footnote. If it is not correct, it certainly represents a clever attempt to change the British minds by placing the topic into the more heated context of Greeks versus Turks, something which the Bishop of Kitium had already complained about in terms of prejudice (SA1/3787/1885).

> Why should it be granted to an Englishman who is not a tanner himself and who carries out this undertaking for commercial speculation: and why should it be refused to me who will make use of the bark for my only business? … Besides that, it deserves remark that the English contractor has to sell to none else but me, the others getting a license, and consequently the refusal made to me I am right to attribute to the desire of profiting him (SA1/385/1889).

In the ensuing discussion of what the government was going to tell the Secretary of State when they forwarded the petition to him, Law (the PFO) repeats an earlier non-specified statement that Stylianos had been convicted of forest offenses in the past as well as the government decision to not grant permits to any who had convictions. He provides more details of Stylianos' offense, noting that in 1882 Stylianos had been sentenced to twenty days imprisonment for receiving bark unlawfully. Although the Turkish tanners also had been accused of several offenses, none of their offenses were ever proven in court, so in Law's mind it is acceptable to continue granting them a license (SA1/385/1889).

The response of the Secretary of State is to recommend that the system of granting permits be discontinued as of January 1 of 1890 and the Forest Department collect and sell the bark itself. This is what Law had recommended several years prior but had not been able to convince the rest of the government to do. The response to Stylianos states as much, as well as that they will not grant him any "relief" permit between then (August) and January, as he has had prior forest convictions (SA1/385/1889).

As if the situation is not complex enough, in the meantime Stylianos is summoned before the District Court on a charge of having unlawful possession of bark. The court is basing its charges upon Law 12 of 1889, the new forest law which was passed in late April of that year and shifts the burden of proof onto the possessor, instead of the accuser. Stylianos has a store of bark worth £100 or more, and he cannot satisfactorily account for how he obtained it as of September of that year. Since he has no permit to gather bark,

the prosecution argues that it must be obtained illegally, and the court seems to side with the prosecution (SA1/385/1889).

Both Law (the PFO) and Stylianos protest this decision. Law is the first to file a concern, a week before even Stylianos sends a petition. Law expresses concern to the CS that the government might appear to be acting too severely under the provisions of the Forest Law of 1889 by taking all of Stylianos' bark. Therefore, the courts should just confiscate a part of it, as it is likely that he obtained some illegally[46], and by doing so he will still be punished, but in a manner which will not rile the public (SA1/385/1889).

As for Stylianos, he sends a petition a week later in which he argues that it is patently unfair that he be held to the laws put in place in April for bark which he has been collecting since before the passing of the law. His petition to the HC drips with sarcasm; he is certainly not behaving like an ignorant or scared native. He notes that he produced a book in Court which listed the people from whom he had bought the bark as well as provided purchase dates, but he could not very well have called everyone into court as witnesses, as it would have been over 500 villagers. Nonetheless, he did call witnesses for the largest amounts, and the Courts would have been satisfied with their testimony were it not for the new 1889 law. He concludes by stating that,

> I would not for a minute try to criticize the said law which in my humble opinion departs from the principles of all existing laws and which upsets both English and Turkish civil and Criminal procedures. But I firmly believe that the law was not contemplated to have a retrospective effect, for supposing I had called one by one all the 500 villagers and proved the purchase of the 50,000 okes of bark the witnesses would not have been able to identify the bark which they sold me and therefore any attempt to satisfy the Court, owing to the above mentioned law, would have proved useless …. I doubt whether any inhabitant of Cyprus could prove the lawful possession of fuel stored in his house for domestic purposes (SA1/385/1889).

[46] Law and Warren have a disagreement within the Minute Papers. Warren thinks most of it illegal; Law argues that quite a bit of it is legal. Again, considering their actions in previous instances – Law being on the side of the native, Warren behaving as the stereotypical colonialist – this argument is rather predictable.

Unfortunately, what Law did not know while writing his opinion a week before the Stylianos petition was that Stylianos had included one more piece of information in his petition to the HC than just complaints regarding the fairness of applying the law. Specifically, he had found out during the trial that a factor in his judgment had been that he had supposedly been sentenced to 21 days imprisonment for a breach of a forest ordinance. However, he had never served a day in prison, so he notes that the Courts must be mistaken. Since the full justification for not granting Stylianos a permit to collect bark previously had been the belief that he was convicted, and further, had he had a permit, he likely would have never been brought to trial, his claim turns everything upside down. Nonetheless, the Court still decides to withhold a portion of his bark as part of his current conviction, evidently making the argument that even if they confused him with someone else, that does not excuse him from any current perceived crimes (SA1/385/1889).

Stylianos tries one last attempt in 1890 to win what he sees as “justice”. He sues the government employee who was in charge of the Daavi Court registrars during 1882 when he was supposedly convicted. He does not appear to have been successful – the case is classified as “frivolous” by the government, although no one questions that his name was incorrectly recorded (SA1/380/1890). However, in the process, a full series of Daavi Court errors are uncovered. Perhaps the most disconcerting one is the case in which a man who appeared as a witness against the accused is listed as the one who was convicted (SA1/421/1890)!

This bark saga illustrates several points which contextualize the colonial experience. The interplay of personalities is continuously obvious, as is the tenacity of the Cypriots. Further, the importance of random, seemingly unrelated factors in understanding why outcomes occur is also present, such as the mistake of a court clerk in this situation. In sum, the examples from 1878-1885 and 1885-1895 illustrate the importance of individual

personalities, along with resistance, budget concerns, and even potential business ventures. These factors continue to play a role throughout the rest of Cypriot history as can be seen in the final section below that illustrates perhaps the best example of the effect that one individual can have on the environmental history of the island.

Exploring the Environmental History: 1921-1936

Unwin, the most demanding of foresters[47]

Dr. A. H. Unwin requested to be sent to Cyprus sometime in the latter half of the 1910s, as he was unhappy with his appointment in Nigeria. In March of 1919, while he was on temporary pension by the Nigerian government on account of health reasons, he sent a letter to the Under Secretary of State asking for the status of the application he had submitted. In this letter he stated, "I should naturally like an appointment in a healthier colony. Having read the report of Mr. Hutchins on the forests of Cyprus and noticed from a recent report that much more timber felling has been done on the Island" perhaps now the full recommendations of Hutchins could be carried out. "[I]t is probable that a little money could be profitably spent in ascertaining exactly how much the forests can be made to yield permanently" (SA1/718/1919). The reply from Cyprus at that time was that Unwin's presence was unnecessary. Upon the retirement of Bovill in 1921, however, the Cyprus government altered its stance and hired him (SA1/718/1919). He unsuccessfully requested transfers from the island in 1926 and 1929 and finally retired on January 10, 1937 (CO 323/1135/4, CO 67/269/3).

In forestry accounts since Unwin's period, his accomplishments are variously described. He is either hailed as the savior of Cypriot forests through his emphasis on goat removal which he viewed as necessary to recover forests that still were described as

[47] This phrase "the most demanding of foresters" is from Thirgood (1987). It becomes almost a Homeric epithet in his text, appearing on multiple pages throughout his description of Unwin.

being at the brink of ruin, or he is viewed as a man with a tyrannical personality, but nevertheless an exceptionally good forester who competently managed and developed the Cypriot forests. A typical account of the forest history notes that it was not until 1921 (i.e. the arrival of Unwin) that any attempts were made to create a Forest Department commensurate with the value and the importance of the Cypriot forests (SA1/1025/1944/3). The most negative accounts one can find concerning Unwin simply state that he did not further the department as much as might have been accomplished under a different leader.

To understand the logic behind these descriptions of his reign, one must know a little bit about the man's personality[48]. As Thirgood (1987) describes him, Unwin was an "eccentric, physically small, Napoleonic, difficult man, and a fierce disciplinarian" (137).

> Completely committed to the problems of Cyprus, he became obsessed with the grazing question and became probably the best-known figure on the Island, second only to the Ethnarch in the eyes of the Cypriot villager. His mission in life, to which he subordinated all else, became the improvement of the forests. Unwin anecdotes have entered into the rich peasant lore of Cyprus. He came to be venerated as a diety, albeit in the stern Olympian tradition, by Cypriot foresters (137).

This description of a man fiercely dedicated to the forests with an intense dislike of forest grazing is frequently borne out within archival files. His effect on the Cypriot population is also evident when speaking with retired forestry staff, although when speaking with the general population, the district forest officer is a more frequent point of memory than Unwin.

By all accounts, therefore, Unwin was a seriously dedicated employee, tightly attached to his forests. But what role did he see these forests playing? Following the popular thinking of the time, still the same as when Madon first came to Cyprus, the forests were important for both timber and for climatic protection. When Madon left, he

[48] See Appendix V for a more detailed description of his personality, including his strongly criticized behavior during the 1931 uprising.

had suggested that the forests needed around twenty years to recover before the Cypriot forests could fulfill the timber production aspect of the "multiple use". In Unwin's mind, as illustrated in his initial letter to the government in 1919, it had now been long enough to follow through with intensive timber production. Based upon the productivity of the forests during World War I, he offers his services in further developing them. His commitment to the forests therefore was heavily centered on the economic aspects of forestry, as opposed to the climatic influences the presence of forests might have. Had the increased production of the Cypriot forests during World War I represented that the forests had been developed to such an extent over the preceding three decades that extensive felling could be undertaken without damaging them, then Unwin's goals may have matched the situation on Cyprus. Unfortunately, that was not the case.

Background to World War I Fellings

A brief history of the events surrounding the WWI fellings is necessary to understand why I have made the statements above. At the start of the war Bovill had been the PFO for almost two decades, and associated with the Forest Department for three decades. During that time the Forest Department budget was almost always low, and Bovill had concentrated primarily on lowland forest plantations with the money he received. Thirgood (1987: 133) suggests that Bovill's period was a positive time as the Forest Department by 1914 had the support of the government and the Forest Department itself was firmly established. Thirgood is slanting the evidence quite a bit here, as archival files show that the government, especially the courts, questioned the Forest Department's actions, and, while the Forest Department did receive additional funds post 1907, they still did not have a large budget.

Thirgood is correct, however, that Bovill's period does appear to be fairly calm and positive, apart from the Legislative Council complaints above. However, this was not on

account of the “increasing appreciation of trees by the population at large” (Thirgood 1987: 133), but rather because Bovill did not have the funds to attempt any large scale forest works. He upset the villagers in the Northern Range on several occasions, but on a whole, especially for the Southern Range, he appears to have left the Cypriot mountain inhabitants to their own devices. Not surprisingly, within this setting, the forest health did not noticeably decline.

Thus, at the start of World War I, little had changed in the condition of the Cypriot forests since Dobbs had presented his numerous crisis narratives. A forester interested in dense pine stands would still see a sparsely stocked range. Several sawmills did exist (one at Ayia and another at Appies), and several more were put in place (at Fleyia and Limniti), but there were still few roads going into the dense forests. Therefore, the only accessible forests available on short notice were those on the lower elevations, those near the sawmills, and those within the fuel plantations which Bovill had developed during his tenure. These lower elevation forests were precisely the ones that villagers who had customary rights to gather forest produce had depended upon for both their fuel and timber needs as well as for grazing their goats.

As a later forester notes in 1934, the fellings were made without consideration as to the regeneration of the area by untrained foreman. “The few trees that were left were those too small, too crooked or too fungus-attacked to serve for timber and were thus equally unsuitable as seed bearers for natural regeneration. In certain areas sowings were made but as they were fully exposed to the sun and grazing goats few survivors exist” (SA1/460/1934/2). He speaks specifically of Fleyia Valley, noting that it was “ruthlessly exploited during the war” (SA1/460/1934/1). Ironically, in the midst of all this destruction, “for one annual period the total expenditure of the Department was exceeded by the revenue” (SA1/460/1934/2). This revenue increase is what Unwin saw when he requested a transfer to Cyprus. Unfortunately, he did not realize the second part of the

revenue increase, that it had occurred on account of “neither good business nor in any sense forestry” (SA1/460/1934/2).

Returning to Unwin

Therefore, with the benefit of hindsight, the decision to hire Unwin was a poor idea for both Cyprus and Unwin himself. Unwin was solely committed to making the forests more productive, and his plans for ensuring and increasing the productivity of the forests involved clamping down on all forest offenses so as to guarantee the best returns from the existing forests as well as trying to claim as much additional forest land as possible (in most cases, unforested hali land which he argued would have been forested in the past and should be in the future). Archival files untouched since the 1880s about Ottoman Land Laws detailing what legally could and could not be defined as forest land were requested and reviewed by Unwin, evidently in hopes of finding the legal basis to allow him to prosecute forest offenses to a fuller extent than they had been in the past. Questions about customary grazing rights, and agreements made during the 1880s and 1890s with villages and monasteries as a means to settle delimitation issues were reviewed and re-questioned (e.g. SA1/979/1892, SA1/1404/1894). Unwin’s energy in searching and convicting offenders was unstoppable; he applied the same dedication to ferreting out offenses (perceived and real) and legal justifications for claiming land (forest covered or not) as he did to any other form of forest management.

Obviously, somebody intent on convicting all offenders would not be a popular figure on Cyprus. However, the situation was made much worse on account of WWI. Not only did the villagers have to become accustomed to a much stricter figure than Bovill had been, but as explained previously, the officials had also clearcut in order to produce supplies for the war effort the areas that the villagers had traditionally relied upon for forest goods and grazing. Since Unwin was intent on reforesting those areas, he was

especially strict about disallowing any forms of activity within them. As will be further discussed in Chapter 6, the residents were in a very tight spot. For now, it is enough to say that Unwin's behavior did not win over the hearts and minds of any of the rural Cypriots to the need to protect and preserve their island's forests, no matter whether he had believed to have done so or not[49].

Unwin's impact on the Cypriot environment did not just rest upon his zeal in finding and punishing offenders, but also in his resurrection of Dobbs' "crisis narrative", which Bovill rarely employed. For Unwin, the forests are continuously in a degraded state[50], the goat and its shepherd are the primary ones to blame for this degradation, the rights of the remaining monasteries and mountain inhabitants need to be repealed, and the department never has necessary funds to address these issues. For example, "The present condition of the mountain forests is extremely poor, owing to the prevalence of grazing and the methods of the shepherds. Fires destroy the coniferous high forests and the invaluable undergrowth, while the grazing prevents the natural regeneration which would reclothe the burned areas" (SA1/535/1927).

More specifically, "the grazing of 3 semi-secularised monasteries and numerous villages, in … important catchment areas, keeps the Forest so open and scanty" that it actually has little beneficial effect on the steep slopes, upon which one can see the effects of denudation and erosion. Further, according to Unwin, this denudation and erosion has led to other environmental issues. The rivers are dry in the plains for ten to twelve months of the year, and there is not enough water for irrigation, sometimes not even enough for drinking. When it does rain, disastrous floods frequently occur. Finally, this

[49] He would argue that he had through his emphasis on teaching the Cypriots to respect the trees. As several examples of the types of activities he undertook, he created a Forest Treasures organization complete with a journal, staged Arbor Day celebrations, and held timber exhibitions.

[50] Unless he is trying to defend his own work on Cyprus, and then they are smoothly recovering. Unwin seems to have no issues with describing the forests as on the brink of destruction in one file, and then praising them in another file (CO/67/225/6, SA1/444/1933).

lack of water combined with the summer heat causes discomfort to animals and serious damage to vegetation (SA1/535/1927). Unwin's complaints vary little from the descriptions of the island by the travelers, so it appears that Unwin has managed to create a version of the crisis narrative which blames monasteries and mountain villages for what is in fact the typical Cypriot environment. Dobbs, who attempted to do a similar thing close to a half century prior, would have approved.

As can be surmised from the above, the primary way Unwin sees to get out of this tale of destruction is via the removal of the goat and shepherd and the further provision of money to the department for reforestation and exploitation works. Unwin's crisis narrative has one additional aspect that Dobbs never perfected, however – the inclusion of statistical figures to clearly illustrate how much money the forests could make for the government if Unwin and his department were to receive the funding he desired (e.g. £600,000 in 1928). Unwin's figures of profits in these tables are extravagant and meant to immediately sell to a colonial official concerned with the budget. Although one bright government official notices as early as 1922 that "Dr. Unwin's figures never fail to please but are, I fear, liable to deceive" (SA1/813/1922/1), nonetheless the government does provide Unwin with additional money at various times throughout the 1920s.

However, the government's support of Unwin quickly wanes as he upsets the Cypriots more and more and as his grand schemes to make the government money by first inserting money into the system repeatedly fail. Unwin is told to cut back on the commercial aspects of the department in 1922 and again in 1926, but he does not follow through on the government's requests (SA1/1643/11). He instead submits huge, at times over one hundred page, documents justifying further expenditure in the forests based upon his statistical tables. As Unwin notes, "the best method of Conserving the Forest is by using the best methods of Utilisation" (SA1/460/1934/1). Unwin simply cannot imagine forest management without forest exploitation – after all, that was the purpose in

his initial request to come to Cyprus – and he seems to also be incapable of seeing that the island cannot support the type of exploitation he desires.

In the meantime, his policies have become an issue of concern throughout the whole island. As an early example, on July 23, 1923, the Officer Administering the Government sent out a notice to all commissioners in which he stated that the general policy adopted by the Forest Department "should be one of sympathy and conciliation" as much as possible, as a contented villager was a potential friend. Further, the officials should not rigidly insist on the production of kotchans (title deeds) for grants of forest land for cultivation; instead, where the villagers could say that it had been cultivated for the previous five to ten years, they should be allowed to have the land[51]. Finally, he stated that in the poor villages in the hills, grazing permits for animals should be allowed – there should not be an aim for total exclusion of the goats, but the officials could try through cooperation to reduce the numbers (SA1/1164/1914).

These new policies are far more lenient than those of the 1880s and 1890s and are certainly far more lenient than what Unwin thinks he legally has the right to enforce. Not surprisingly, he does not appear to follow them. He instead complains that the Karpas Forest (the Northern Range) was opened for grazing (presumably by the Commissioner of the Famagusta district) without his knowledge, and further states that he would not grant permits to heirs nor would he allow people to keep the same number of permits if their stock dwindled at any time (for example, if they had a bad year and lost several animals, the next year they could not replenish those animals). Unwin argues that by following his approach, the amount of grazing in the forest "will gradually diminish, without hardship to individuals".

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[51] As further discussed in Chapter 5 and reflecting Collyer's legal ruling discussed earlier in this chapter, the Forest Delimitation Commission had followed a broad definition of forests throughout the delimitation process. Thus, it was not uncommon to see lands suited for agricultural cultivation included in the delimited forests. In the 1930s, Unwin estimated that a full 25 percent of the proposed Minor State "forest land' contained no forest (SA1/460/1934/1).

The Commissioner of Famagusta, A. M. Fleury, in turn writes to Unwin to inform him that he is wrong in his actions. He tells Unwin that he should be issuing permits for the same number of animals as were counted in 1923, and further that his plans to refuse permits to heirs would make grazing cease to exist in the course of a few years, “which is not in accordance with the directions of the government, who laid down that this matter was to be approached in a spirit of liberality and conciliation”. Unwin replies to Fleury with the statement that “the days of the landless shepherd are numbered. It only remains to make his extinction as nearly painless as possible”, and Fleury responds with, “I beg to inform you that, as it appears to me, you are acting in contravention of Government orders” (SA1/1164/1914).

Even complaints from other Government members, such as above, are not enough to make Unwin alter his strategies. An increase in forest fires and offenses combined with widescale complaints lead to the creation of a Forest Enquiry Committee in 1927 and a visit by an external forestry expert in 1929 (Troup, the director of the Imperial Forestry Institute at Oxford and an expert on Indian sylviculture). The consensus of the study and the forest expert is that Unwin’s policies are doing more harm than good in several aspects, and Troup recommends the creation of major and minor forests, with the natives being allowed to use the minor forests as one way to reduce the negative damage. This echos suggestions from previous years. Another recommendation is that Unwin stop trying to collect new pieces of land for forests, as he is increasing hostility to the department by claiming pieces of brush covered hali land and disallowing those who had been accustomed to graze their flocks in the area to use it. As yet another suggestion of the negative effects of Unwin’s policies, a committee put together to review various development proposals in 1928 ranked forestry last in terms of importance for the main development lines (CO/67/225/6).

Somewhat inexplicably, Unwin still is not forced to follow the strategies recommended by Troup, although it is assumed that he will. He does not, arguing that he knows the island better than an expert who stayed for a short time, and it is not until 1934 that the government starts to seriously look into what he is actually doing. The results of their study are telling. Unwin has been spending far more money than he is making on a misguided attempt to exploit Cypriot timber. He set up a system of timber stores in the main towns that go unused because the local people have found that it is less expensive to purchase imported timber than buy local timber at his profit-driven prices. The Cyprus Mines Corporation, which had been a large buyer of Cypriot timber, is refusing to buy timber by 1934 because the quality is so poor. Unwin's attempts to market Cypriot timber abroad also fail. In the meantime, rural Cypriots are being repeatedly slapped with fines and offenses for trying to eke out a living in and among these forest stands which Unwin is trying so desperately and unsuccessfully to market to outside buyers for profit.

The solution, in the 1934 committee's eyes, is to cease all commercial felling, and they repeat this opinion numerous times throughout their formal study.

> The conservation of the Forests should be the main, and for the present whole, function of the Forest Department and we are of the opinion that nothing should be taken out of the Forests excepting that which is necessary for their preservation, extension and improvement….
>
> We are of the opinion that Cyprus will never rank as a timber producing country and the best that can be hoped for is that Cyprus timber may be used to a greater extent locally….
>
> We reiterate our opinion that the proper function of the Forest Department in Cyprus is conservation. We do not consider that the commercial exploitation of the Forests is at present, or for many years to come, worthy of serious consideration. The quantity of first class timber is insignificant and other qualities are not worth working….
>
> Far from reducing the 'cost of conserving the forests', the Conservator of Forests has demonstrated by his own figures that the commercial side of the Forest Department is run at a very serious loss to Government (SA1/460/1934/1).

The Committee's final paragraph could be applied to the entirety of Unwin's time on Cyprus.

> We are impressed by the zeal and energy of Dr. Unwin, but we feel that to a very large extent this zeal and energy is misapplied. We feel that the Forest Department has mistakenly attempted to justify its existence by its commercial activity, whereas there is ample justification for the Department in its conservation services, which services can be rendered to much greater advantage both to Government and the Island generally, by the abolition of commercial activity (SA1/460/1934/1).

Based upon the events above, the Unwin period certainly illustrates the effect that one man, essentially on his own forest crusade, can have on the events of the island. No other government member is in support of his efforts, and yet it took multiple warnings and increasingly stringent governmental oversight during the financial depression of the 1930s to finally force him to change his ways. In the meantime, rates of offenses and fires dramatically climbed, to the dismay of many (see Figs. 7.1-7.4). In a role reversal of stereotypes, by 1934 the main government is forcing the forester to stop felling trees in the forest, as opposed to the government urging the felling of more trees for future development. The Cypriot forests, which Unwin arrived to economically exploit, are simply not able to be marketed in the manner Unwin desired. Despite the similarities in laws and forest employees and no matter how much effort is expended, the Cypriot forests are not capable of being as profitable as some of the other forests within the Empire, such as those in India,

CONCLUSION

To summarize this chapter, the Cypriot forest history is constructed through a series of interactions between people which frequently have no place in the stereotypical tales of colonial environmental history. The colonial officials argue between themselves as to how strict the policies should be in regard to curtailing mountain lifestyles, even at times

siding against one another. The Cypriot elites suggest and guarantee the implementation of one of the strictest forest laws in the colonies at that time. Legal definitions can usurp ideas as to proper forest management. A question of a minor forest produce such as bark ends up with a petition to the Secretary of State for the Colonies. Tales of forest destruction and degradation are only common when a trained forester is acting as PFO, but those same PFOs are the ones attempting to exploit the forests for monetary gain. In the early years the HC has to stop the PFO from felling trees in areas which the PFO himself had said were in too poor of shape for exploitation, while in the 1930s it falls to the main government to halt the forest exploitation practices of an over-zealous PFO and urge the preservation of forests for conservation sake. The Cypriot forest history is complex indeed.

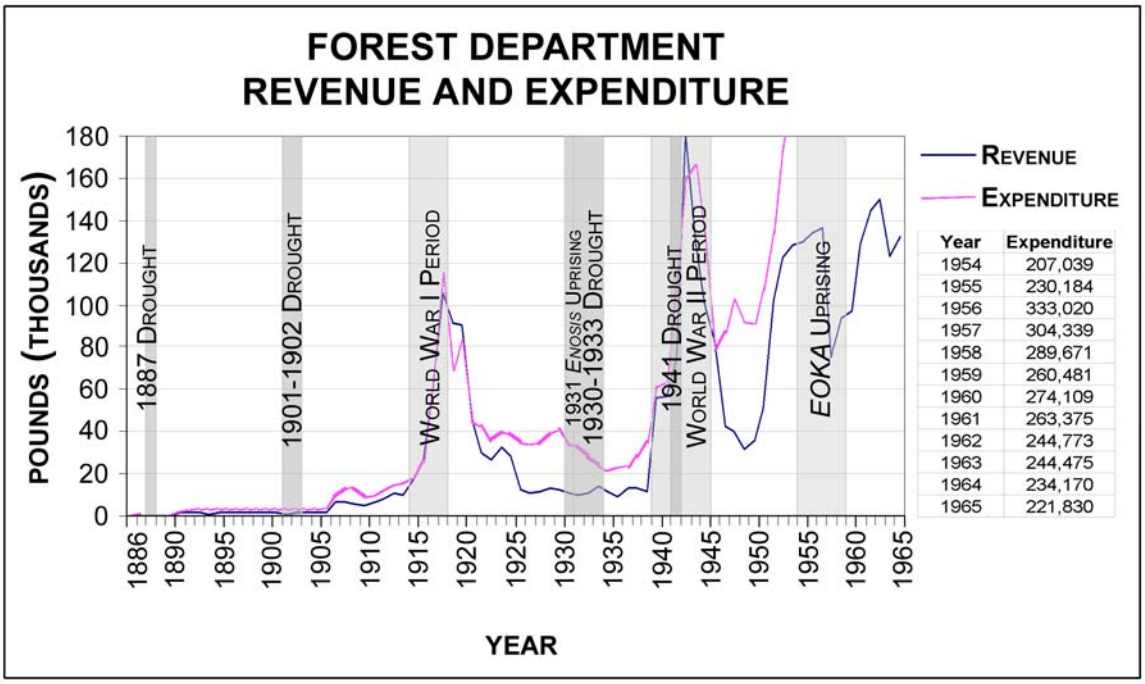

Figure 4.1. Forest Revenue and Expenditures

Chapter 5: The Process of Claiming the Forests

According to the accepted history presented by the Forest Enquiry Committee in 1928, "Prior to the delimitation, although several Turkish laws existed for the protection of forest lands, no steps were seriously taken to enforce them, and the villagers not only looked upon but used the forests as their common property (1) in which they could graze their animals at will, (2) from which they could cut unlimited timber and fuel and (3) where they could cultivate wherever they wished" (Gordon 1955:410). A demarcation of property rights[1], stipulated by the 1881 Delimitation Law, was necessary to solidify state claims over the forest lands, and this delimitation was largely carried out between 1884 and 1896. As the story is told, there were few initial objections. "The delimitation was not objected to at the time as the population was small, ignorant and apathetic, and large tracts of uncultivated but cultivable land existed outside the forests" (Gordon 1955:410).

This chapter examines the question of what actually happened on Cyprus regarding the delimitation. The first step in answering that question is to outline the British understanding of the Ottoman Land Code, as it was through their understanding of it that they in turn believed themselves to be justified in delimiting and claiming the land. This legal system, with its recognition of common property areas, can be traced back centuries in the circum-Mediterranean context. This longevity does not mean, however, that the law was well understood by the British, as will be seen in the section below.

[1] The delimitation process followed these steps. The FDC (Forest Delimitation Commission) would survey the forest lands on the island. In each forested area, they were to speak with the villagers to determine who, if anyone, owned the land. If somebody did lay claim to the land, a title deed had to be produced specifically stating that area. If nobody laid claim to the area, then the State assumed that it was all state land. The delimitation boundaries were posted with the commissioner of the district and also the mukhtar of the effected villages. Villagers who felt that their land had been unfairly included had the option to appeal within 6 months of the date of the notice regarding the delimitation. After 6 months, the delimitation was to become binding.

OTTOMAN LAND LAW AND ITS RELATION TO FORESTRY

When Britain occupied Cyprus on July 13, 1878 following the Congress of Berlin, the agreement was that Cyprus would remain a part of the Ottoman Empire. As such, Cyprus was to be governed under the Ottoman Land Code[2]. Trying to interpret this Land Code caused no small frustration for the British. Multiple attempts were made, especially in the early years of British occupation, and consensus both between the British officials as well as between the British officials and the Cypriots was a difficult task to achieve. "It has often been, and no doubt will be in future, a matter of extreme difficulty to give a reasonable construction to some of the more obscure articles of this code, and the Supreme Court has found no inconsiderable difficulty in doing so" (Middleton 1900:141).

The various ways in which the laws were interpreted played a large role within the development and enactment of forest policies, especially the forest delimitation during the 1880s and 1890s. A general description of how the code had come to be commonly understood by 1900 is useful for contextualizing the previous debates and actions of the Forest Department, as well as the early 20th century decisions to allow parts of the delimitation to be overturned. For this general understanding I primarily follow a piece by Justice Middleton (1900), with several inclusions by other authors as needed.

The 1858 Ottoman Land Code

The land code as it existed when the British obtained the island as a protectorate had been promulgated on April 21, 1858, by the Sultan Abdul Mejid. It divided land into five

[2] This is not to say that the British never changed the Ottoman legal structure, since they did when they felt it was necessary. The best example of this is the Cyprus Courts of Justice Order 1882, which established British style courts and gave the British the authority to amend Ottoman Laws. Other notable examples of this include the Taxation Amendment Law of 1884, which removed the tithe on grapes and the Reform of Taxation Law of 1897 which removed the tithe on a variety of fruit trees. Additional examples include the Immovable Property Limitation Law of 1886 and Law 19 of 1890 and Law 10 of 1885. The Ottoman Land Laws themselves were not fully repealed until 1946 (Gordon 1955:405).

general categories: Erazi-i-Mirié, Erazi-i-Memlouké, Erazi-i-Metrouké, Erazi-i-Mevat, and Erazi-i-Mevqoufé[3] (Middleton 1900:141-142).

Erazi-i-Mirié

The majority of the land on Cyprus was Erazi-i-Mirié, State Land which was "rented" to individuals (generally for life and as a "permanent leasehold" could be passed down through generations to people who had the right of Tapou, i.e., the right to inherit Erazi-i-Mirié land). The British understood that the Ottoman purpose in renting this land had been to encourage land cultivation so that the state could earn money through the tithe[4] and land tax (Middleton 1990: 142, 144-149). As cultivation was the purpose behind leasing the State land, if cultivation ceased, then, as the British reasoned and the code seemed to support, so did the permission to lease the land. According to the land code, if land was left uncultivated for more than three years, "without valid excuse, such as recuperation, inundation by water, or the capture in war of its possessor" (Middleton 1900:145), the State could reclaim the land, but only if the leasee (possessor) did not want to pay the equivalent value of the land to the State, in which case he could continue to "lease" it.

Following the above interpretation, the British (including the foresters) began to attempt to reclaim pieces of land for non-cultivation, only to quickly receive petitions that the law was never actually implemented on Cyprus[5]. Some of the colonial officials also supported the Cypriot view. Nonetheless, the colonial government opted to leave it in

[3] The spelling of these terms alters considerably between sources, and especially within the handwritten archival files. Further, Middleton prefers to see the last category, Erazi-i-Mevqoufé, as being a secondary class of land, since it is composed of land drawn from two of the other land types, as discussed below.
[4] The tithe was to be 10%, but Savile (1878:137) and Biddulph (1889) argue, presumably reflecting the general British view, that this should not be viewed as a high amount, as the tithe in this situation is essentially the same as rent.
[5] A further discussion of this can be found later in this chapter.

force, although they did extend the non-cultivation period to ten years through legislation in 1885.

The three, then ten year non-cultivation rule was just one of the restrictions placed on Erazi-Mirié land. Officially, one could not "make bricks or tiles of the soil, nor make it into a garden, vineyard, or wood, nor plant trees, nor build on the land, nor may he or any one else bury a corpse on the land without the permission of the competent state Official….[It has] also been gravely doubted …if a well can be dug …without authority" (Middleton 1900:145).

In terms of planting trees, however, there was an exception to the law for fruit bearing trees and vineyards. These would obtain a legal status of Mulk (Erazi-i-Memlouké), or full property, if they had existed for at least three years, even if permission had never been asked, and tithe could be collected from them. It does not state that the same exception applies to forest trees, although Middleton doubts that the Ottomans would have forced the inhabitants to uproot trees planted. Once the vineyards or trees had dried up or been removed, then the land would revert from Mulk to Erazi-i-Mirié again (Middleton 1900: 145-146).

As for naturally occurring trees on the land, "Originally the possessor of Erazi-i-Mirié bearing trees growing naturally could not cut them down or deal with their timber without paying the value of them to the Treasury. By a later law[6], however, this restriction has been abrogated, and the lawful possessor of the soil is now at liberty … to deal with trees of this kind as he chooses" (Middleton 1990: 146).

Trees planted and trees growing naturally were also treated differently in cases whereby the leasee of Erazi-i-Mirié land mortgaged his right to lease the area[7]. In that situation, trees growing naturally would automatically remain with the land, but Mulk

[6] He appears to be referring to the 1870 Ottoman Forest Law, which is discussed below.
[7] It does not appear that the right to Erazi-i-Mirié could be sold except in cases to pay off a debt (Middleton 1900: 148-149).

trees, i.e. trees planted by the leasee, presumably only fruit trees, would remain with the previous leasee of the land unless he chose to sell them. In order to sell them to the new leasee, a written declaration of sale would need to be made in front of a land registry officer who would then issue new title deeds (Middleton 1900:147). Thus, the law envisioned instances in which one person might hold the right to cultivate Erazi-i-Mirié land, but another person might hold, as full private property, trees found upon that land.

Title deeds, as mentioned in the above paragraph, are a necessity for proving the right to hold Erazi-i-Mirié land under the Ottoman Land Code. However, as with most parts of the code, there were exceptions to this. Under the Ottoman code, the Land Registry Office would issue a title deed to an individual if he had held uninterrupted possession of Erazi-i-Mirié land for a period of ten years, regardless of the existence of a previous leasee. If, however, the original leasee of the land could illustrate that s/he had a certain disability, such as madness, or that s/he had been in a foreign country, s/he had ten years following the cessation of his disability to reclaim the land from whomever had been occupying it. The British altered this law in 1886 (the Immovable Property Limitation Law), by stating that a person with a disability only had five years following the cessation of the disability to claim the land, and further, if a person held possession with registration of Erazi-i-Mirié land for ten years, s/he could receive an indefeasible title (Middleton 1900:147).

Apart from what the legal code officially said about title-deeds, the issues concerning the steps required to receive one and their subsequent accuracy were more worrisome. By 1900, the British were priding themselves on “much greater accuracy and care … in the registering of new titles and canceling of old ones than prevailed under the Ottoman administration” (Middleton 1900:147). However, Middleton also notes that “there is still, however, large scope for improvement” (147), and he does not imagine that this

improvement would occur until a proper cadastral survey of the island was made[8]. Middleton's desire for greater accuracy is well placed, as the history as illustrated below reveals repeated issues with title deeds.

Other Land Classes

As for the other classes of land, the Land Code states that areas such as communal forests (Baltalyks), places of worship, village pasture-lands (both summer and winter), and public roads, can be considered to be part of *Erazi-i-Metrouké* land (Middleton 1900: 150). In western terminology, this land class can be conceived of as commonage. More generally, this land included "lands left and dedicated to the public" and "lands left and assigned to the inhabitants of villages or towns as a body" (Middleton 1900:143). However, Middleton suggests that although they are officially subject to the provisions of the Land Code, at the same time, "these places cannot be individually possessed, bought, sold, inherited, or used for any other purpose than that for which they were destined and assigned *ab antiquo*" (1900: 150), so the Land Code provisions are pointless in respect to them.

Erazi-i-Mevat is essentially waste land, or hali or khali land (in US terminology, federal land; in Grove and Rackham 2001 terminology, roughland ?), which can function like Erazi-i-Mirié land if the permission of the competent authority is obtained to cultivate it. If cultivation ceases for more than three years without a valid excuse, then one could lose all rights to cultivate the land. Further, if the land was cultivated without first receiving the appropriate permission, the cultivator could pay the equivalent value of the land, the Bedel-misl, and then receive a title deed (Middleton 1900: 143).

[8] Cadastral surveys for most parts of the island were not completed until within the 1920s, see Given (2002) for a brief discussion.

Erazi-i-Mevqoufé, or Vaqf lands (Evqaf in the plural, similar to not-for-profit organizations today), can be further divided into two main classes of land. The first class consists of those pieces of Erazi-i-Memlouké, or Mulk, land which the owners have dedicated wholly or partly to religious organizations following Sharia law. These pieces of land are only subject to Sharia law, and in no way subject to the Land Code. The second class consists of Erazi-i-Mirié lands upon which the Sultan has approved that the tithes and taxes which would usually be paid to the State by the leasee of the land instead by paid to a religious organization. These pieces of land are subject to the provisions of the Land Code, and are controlled by the Evqaf Department (Middleton 1900: 143-144).

The 1870 Ottoman Forest Law

Finally, and importantly, although Middleton (1900) does not specify this, de Montrichard (1874) and Wild (1879) briefly describe the effects of an 1870 Ottoman Forest Law, which they assume to have been promulgated as a response to broad concerns about deforestation throughout the Empire at that time. Madon and Dobbs both fall back on their description of the law, while Thirgood (1987: 85-88; 102-104) provides one of the most easily accessible summaries of these previous works. It should also be noted that despite knowledge of this law, several of the colonial foresters questioned whether there had yet been the opportunity to implement it on Cyprus (Wild 1879), just as some had questioned how strictly the original land code was followed.

Because of the limited accounts of this law, it is uncertain how different it actually is from the items concerning forests contained within the Land Code as described above. De Montrichard (1874) contrasts the two by stating that before the 1870 law the State believed that all trees grown naturally (i.e., spontaneous regeneration) belonged to it, while this new law allowed for more types of ownership. However, de Montrichard

further notes that practically speaking, the State only reserved for themselves the large trees situated near their naval shipyards[9], and abandoned the rest to the people in a type of unregulated commons with no direction or control of any sort[10] (37-38). For de Montrichard there were just a few exceptions to state ownership, and those were the areas which the rulers gave to important people through special acts, or to pious foundations for the maintenance of locations such as public monuments, fountains, and mosques and administered by the Evqaf.

The new 1870 Law therefore was meant to correct some of the issues caused by the perceived free-for-all attitude[11] of the previous law, according to de Montrichard's reasoning. More specifically, Thirgood states that the 1870 law included the recognition of four types of forests: "state forests; evkaf forests (forest tracts belonging to Moslem religious foundations or set aside in support of pious works); communal forests (tracts subject to *ab antiquo* village rights and reserved for their use); forests belonging to private individuals" (Thirgood 1987:85). This would appear to relate to forests on Erazi-i-Mirié, Erazi-i-Mevqoufé, Erazi-i-Metrouké, and Erazi-i-Memlouké land, respectively[12].

The 1870 law also recognized the rights to free wood, wood fuel, and charcoal for agricultural and domestic purposes, to sell the wood in the village, to collect dead and dry wood, and to use a communal forest as would profit the village over several articles (Articles 3, 3a, 5, 17, 21) (Thirgood 1987:85). A clause in Article 5 especially upset de Montrichard, which he included in its entirety in his work (1874:39) and of which

[9] As noted in the discussion of de Montrichard in Chapter 3, the assumption that the Ottomans utilized portions of the forest for shipbuilding is open to question.

[10] As the accepted history goes, this in turn was to have resulted in the deforestation of areas near villages, but as shown in Chapter 3, this description is questionable.

[11] Although de Montrichard complains that it did not fix what he saw as problems in previous laws, namely, it still did not give the administration absolute authority over the forests (1874:39) Based upon his description of the communal use of the forests, this complaint makes sense. However, based upon his statement that all trees growing naturally were seen as belonging to the state, this statement makes less sense.

[12] It terms of understanding Ottoman thinking regarding property, it is noteworthy that this law does largely differ from the general Mediterranean "common law" that the Ottoman Land Code had been following until this point.

Thirgood (1987:85-86) provides an English translation. Essentially, it stated that certain villages, or townships, could take for free from the State forests the wood which they required for the construction and/or repair of their homes, granaries, stables, carts, and farm implements, as well as all the fuel wood which they needed. Further, they could sell for no charge the wood collected, or charcoal made from that wood, which they transported to their village bazaar with the help of their carts and animals. However, if they were to gather a large quantity of wood and/or sell it at a bazaar outside of their own village, then they would be charged a royalty on that wood.

As de Montrichard interpreted this clause, it was a customary right which would allow the consumption for free of around 100,000 m^3 of wood (which reflected about half of the quantity of wood which he estimated was available for use on the island). However, despite his dislike of this clause (which certainly created a headache for the later foresters as well), he did not have much hope that it could be changed because of the level of poverty of the inhabitants. They did not have the money to purchase the amount of wood they needed for everyday consumption, and trying to force them to do so would only lead to feelings of hatred against the laws and fires in the forest in protest (1874:39).

As noted above, despite their attempts at understanding the 1858 Land Code and the 1870 Forest Law, the colonial officials still had difficulties interpreting what officially was and was not State Land. Thirgood (1987:102) presents a commonly supplied reason for this confusion, arguing that the Land Code "was complex in structure and deficient in application". As he further notes, while the 1870 law did define types of forests, it did not specifically explain how those types would relate to the Cypriot forests. Further, the record books had not been kept regularly, and "there were no maps, no forest boundaries, few records, and no land settlement" (102). Based upon these issues, as the archival files certainly illustrate, it became a question of personal opinion in defining what could and could not be legally defined as state forest land. Perhaps even more indicative of the

amount of confusion surrounding the land laws, letters contained within the Correspondence records of Cyprus (Correspondence, Confidential 4361, Feb. 1881) during the early years of rule indicate concerns that the Sultan could still lay claim to the vast majority of Cypriot land under the laws of Erazi-i-Mirié.

Within this confusion, certain interpretations were widely adopted, including those of Madon's, since the forest law related to delimitation was passed while he was the PFO. Madon argued that although the law did indeed allow for forests to be owned under the four categories already mentioned, he could uncover no strong claims for forests based upon those rights and the government therefore should view the vast majority of forests as State owned. He felt certain that almost all, if not all, of the uncultivated lands on the island (which would include forests in his view) belonged to the government. As Thirgood states, "The course followed by the Administration was to proceed on the assumption that all forests were the property of the state unless claimed and proven otherwise" (1987: 104).

More specifically, Madon often utilized the fact that following the rules governing Erazi-i-Mirié land, the land had to be cultivated. In cases on Erazi-i-Mirié land whereby a person could produce a title deed including the right of Tapou (the right to inherit the land) on a piece of land with trees, he argued that the title deed was invalid based upon the lack of cultivation following the three year cultivation rule discussed above (as indicated by the presence of trees). The archival files illustrate that this understanding led to some rather unhappy inhabitants as well as some seemingly illogical actions by officials if the goal were to preserve the forests. Further, his view that the presence of a number of trees on Erazi-i-Mirié land indicated forfeit of the land may be too simplistic considering the various rules regarding trees as noted in the description of the 1858 Land Code above. In any case, as will be shown below, the forestry officials did not allow for land to be reclaimed on payment, as the initial Land Code did.

Concerning the potential for outside ownership, Madon argued that since the Evqaf Department had not claimed any rights to forests from the Land Registration and Survey Department or from his own Department, then it was safe to interpret their inaction as meaning that they had no rights to the forest. As for communal forests, his survey of the island had indicated deforestation near the villages (as de Montrichard had noted), so therefore, even if they had communal forest rights in the past, surely by their destruction of the area they had lost any such rights. Further, even though he could not positively prove that no rights to communal forests existed, he also pointed out the difficulties, on account of the shoddy record keeping, in distinguishing communal forests from State Forests upon which the surrounding residents had customary rights. As for those customary rights outlined in Article 5 of the 1870 law, Madon, as well as later officials, argued for the need to carefully define which villages had those rights, and to also make it known that the rights were conditional upon the healthy presence of said forests. If the process of practicing these rights destroyed the forest, then the rights were forfeited as well (Madon 1930 [1881]).

Finally, in Madon's view, there were very few legitimate claims to privately owned forests. Several monasteries had made claims, but Madon viewed their claims to be weak and untenable. The majority of later foresters followed Madon's views in this matter concerning private property, although not all of them did. Thirgood certainly believes Madon on this point, and even provides a suggestion as to why the there might be this lack of private property, namely "the long-prevailing attitude that forest was a waste or common free-for-all" (1987: 103-104).

With this context of the legal framework in mind, one can now turn to a closer look at how the process of claiming forest land on Cyprus actually occurred. As noted above, the archival files leading up to and after the delimitation illustrate that the British were

generally concerned with following the Ottoman Laws, although some were naturally more concerned than others and therefore the primary issue rested upon the definition of those existing laws. If Madon's understanding that practically all forest land was State Land was correct, one would have expected the delimitation to have proceeded with few complaints, which indeed is what the accepted history would have the reader believe. However, yet while Madon was still on Cyprus, it became clear that the legal rights of the residents versus that of the State would not be so easy to define.

As illustrated below, multiple files from both Cypriots as well as British officials point to questions and complexities which arose when the British tried to follow the "law". The "law" was continuously reinterpreted by the various officials, but in the majority of cases the view most beneficial to the State was the view that won. It is this superficial series of events which allow scholars like Thirgood (1987) to present accounts stating that the British were only claiming what was legally their property and that any later complaints about the process were most often based upon "exceedingly weak grounds" (163). However, if one takes the time to investigate the underlying discussions and petitions regarding the delimitation, a different, nuanced picture emerges of the scene on the ground.

EARLY DELIMITATION ISSUES – DEFINING AND FOLLOWING THE LAW

As noted above, the government view of the Ottoman laws was not as clear as it might be, and this becomes obvious within the initial attempts at delimitation. One example which embodies these issues can be seen in a set of exchanges during the summer of 1883 which concern the process of delimiting forest land around Agridha, a village in the Pitsylia area (see Fig. 1.3). This early attempt at delimitation has been halted while Dobbs wrote to the CS to obtain an answer to the following question: "In the case of land

under forest which during the Turkish rule was given for purposes of cultivation and which has never been cultivated, or which has remained uncultivated for 10 or 20 years, does it revert to the State?" (SA1/2072).

The situation facing Dobbs is one in which all of the forest lands surrounding Agridha are claimed under title deeds more than ten years old. Dobbs wants to claim these lands as state forest land, and he sees a chance to do so using the "3 year cultivation" law. As Dobbs reasons, since the deeds do not specifically mention the forests, the claimants must have obtained the land for cultivation, and then never cultivated it. Therefore, he should be allowed to delimit it now as State Forest. To further support his argument, he points out that even if the inhabitants had decided to cultivate it, they would have been unsuccessful, as the land is of too poor quality for anything but forests.

The CS turns to the Acting QA (Smith) and the Director of Survey (Grant) for an answer to this question. The QA states briefly that the law allowing the state to reclaim land uncultivated for three years is still in place, i.e. Dobbs can claim it. The Director of Survey, however, gives a slightly more detailed response. He appears to know the Ottoman Land Code, as he points out that the state can reclaim the land after three years of non-cultivation only if there were no special circumstances and provided that the original possessor does not pay the equivalent value of the land to claim it again. Since this is wooded land, however, he is not sure if these rules regarding cultivation remain the same. The discussion temporarily ends at that as the government works to understand the situation of wooded land in this setting. Dobbs is told that he should prevent those forests from being cleared while the investigation is occurring (SA1/2072).

However, the colonial government does not appear to be greatly concerned about the topic, as the question is still not answered when Grant (the Director of Survey) reports on a visit to Agridha in December of that year. As he describes the situation, the people do hold "arazie mirie" title deeds, but the trees are growing too close together to allow for

cultivation. Following his reading of the original land code, he states that the inhabitants cannot cut down the trees without paying their equivalent value to the government.

The inhabitants therefore are in a difficult situation. They cannot cultivate the land on account of the trees, which means that the government can legally claim it from them on account of the lack of cultivation. At the same time, they cannot cut down the trees without paying the government the price of the trees, something which would be fiscally impossible for them. Grant hypothesizes that in this situation, the inhabitants will likely not complain if the government claims the land from them and that the government should therefore take it while they can (SA1/2088).

Grant's simple solution to the problem (claim the land) becomes more complex when Warren (the CS) provides a much different description of the area based upon his own visit in December 1883. According to Warren, the inhabitants are cutting down the trees, converting forest land into ploughed land at a rate of about one to two acres a year. Warren is concerned that within ten to fifteen years the entire wooded area will be gone, and he urges immediate action[13] (SA1/2088).

Biddulph (the HC) ever concerned about behaving in a "just" manner to the inhabitants, asks to see the Ottoman land law quoted while he struggles to make sense of the above contradictions. As he logically notes, "if this wood belongs to private owners I cannot see on what grounds we can first prohibit them from cutting down the trees, + then confiscate their land for not having cultivated it." In stating his opinion, Biddulph illustrates his own uncertainty regarding the Ottoman land code, as the original land code did certainly allow the government to prohibit the cutting of trees on erazi-i-mirié land (SA1/2088).

[13] Recall from Chapter 4 that Warren's personality is more similar to that of Dobbs – "preserving" the trees is most important, the natives are secondary.

The final decision made regarding this case, a case upon which a village's livelihood rested, comes down to an admission of a legal misunderstanding. Grant states that he made a "great mistake" in his initial letter. He thought that a note on the side of the book of Ottoman legislation which stated that a portion of the Forest Rules (Reglement des Forêts) had been repealed was actually a part of the text, but it was not. Therefore, it appeared that the current law stated that the Government has given up all its rights to trees on "arazi mirie, and since the whole of the Agridha forests is held by title deed I do not see now that the Government can do any thing". Grant's new interpretation meshes with other descriptions of the changes made within the 1870 Ottoman Forest Law. The file is closed with a note stating that the government cannot exercise any right over forest lands in this setting (SA1/2088). Unfortunately for the island's inhabitants, and also perhaps its forests, this December 1883 decision to not reclaim wooded erazi-i-mirié land which had been uncultivated for more than three years is not consistently followed in the future[14].

EARLY DELIMITATION ISSUES – THE CYPRIOTS RESPOND

General Overview

The concerns of the HC and the QA for maintaining legality, often conflated with a concern for fairness, continue in the following years, as does the Forest Department's often less sympathetic stance toward the rural inhabitants. In the meantime, however, the rural inhabitants themselves are not silent about this process. The inhabitants resisted the

[14] Ironically, Biddulph's successor (Bulwer), instigated by Warren, approves such action several years later, reclaiming wooded land held by a verified title deed which had been left uncultivated on account of the presence of trees. The individual in this case is given the chance to rent the very piece of land for cultivation which he had previously kept wooded (SA1/365/1892). Thus, in the end, this individual is punished more for saving the forests rather than destroying them via cultivation. Had he chopped down the trees and cultivated the area, he probably would have been able to keep his lands with few further questions.

delimitation in multiple ways. Some quickly cultivated their land prior to the delimitation and met with varying success (SA1/687/1889). Others tried to maintain traditional customs within the newly delimited forests by collecting timber and carrying it into cities at night to escape detection (SA1/1999/1881, SA1/2246), or by hiding it under items that they did have a permit to collect, such as firewood (SA1/3577/1886). Many of them also sent numerous petitions to the High Commissioner, the PFO, and the Legislative Council members. One petition received in November of 1883 and addressed to Biddulph (the HC) is particularly informative concerning traditional land use as well as legal issues, and thus the full text has been included below.

> The Principal Forest Officer having visited many parts of the Island for the delimitation of the public forests took possession of good many lands being our indisputable property; the validity of some can be shewn by reference to the official title-deeds and of others by a long occupation a portion of them serving as pasture-grounds.
>
> Our ownership over the said lands is not, as it seems, disputed even by the F.O. [Forest Officer] himself who, in order to take them away from our hands, puts forward the law respecting the lands of 1274, according to which a person not cultivating his field for three years, loses his right over the same: on this, Excellency, we have to observe: A/ That his law had never been carried into effect in Cyprus by the late Government, and we, poor villagers, were justified in ignoring this severe measure. B/According to the provisions of the said law the lands of our place are of those which require a longer period of rest in order to yield well, owing to the poorness of the soil. C/ The painful and expensive cultivation of our lands, the consecutive calamities as well as the vine disease have placed us in such a difficult position as to be able to cultivate only an insignificant portion of our properties; had the Government decided to put into execution the said law, we would lose the greatest part of our lands. D/ After the British Occupation, another obstacle to the cultivation of many of these lands stood in the way, because some of them consisting of old vineyards and left uncultivated for some years with a view to their being re-planted, and some others having not been cultivated at all, were reduced to the present state because the cutting down of trees was prohibited without which cultivation was becoming quite impossible. E/ Admitting that these lands were cultivated but rarely, the admission would not be a proof that we are not the owners as these lands are covered with trees and the proprietor had the use of the timber or he was the occupant in other way and the Law reserves to such occupants the right of having private forests over which the law respecting 3 years' cultivation has no power.

> We believe we are not in the last far from the truth, ascerting [asserting], as we do, that the late Government having taken into consideration these reasons decided to abandon for six and twenty whole years the application of this severe provision." We hope Your Excellency will do the same.
>
> Signed by villagers from Dimes, Pelendri, Kalo Panaghiotis, Icos, Moudoulla, Phini, Aghios Demetrios, Palamylos, Prodromos (SA1/2090)

This petition, from a group of largely wine producing villages, provides a good insight into the situation of the local people on the ground. This particular group appears to have some power, since, as discussed below, they also obtain the help of the Legislative Council. Their account produces a picture of a mountain economy based upon both vineyards and grazing. During this same general period, Dobbs suggests that the villages involved with vineyards disliked goats, and would in fact welcome warmly any efforts to reduce their number (SA1/2846/1884), so this is an important distinction to make. Their comments also suggest that they are concerned with the proper management of their land by allowing their land to have longer fallow periods than some in order to recuperate, a practice which the British increasingly tended to denigrate[15].

Their comments regarding vine disease are intriguing – phylloxera had created a crisis in the Mediterranean by that time, although it was successfully prevented from entering Cyprus. They practice "fitful cultivation" with their vineyards – moving from place to place to allow the soil to regenerate between seasons[16]. While the colonial officials viewed this type of behavior as environmentally degrading, the inhabitants certainly did not, and furthermore, their comments regarding the invasion of trees into the old vineyards also implies that their efforts were not permanently damaging.

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[15] For the British on Cyprus, fallow came to be seen as a practice which prevented land from being cultivated to its full potential. Rather than leaving the land uncultivated for a year or more, the villagers were encouraged to plant the fields in fodder crops or nitrogen fixing legumes. This drive for agricultural intensification was especially strong going into the 1940s and 1950s, helped along by the supply of artificial fertilizers. The efforts in general never produced the results desired (Christodoulou 1959). Intriguingly, the role of animal manure in the traditional agricultural cycle is rarely acknowledged.

[16] Gordon (1955:406) suggests that the typical rotation for vineyards on marginal forest land would have been to keep it under vineyards for around thirty years, and then under forest fallow for around one hundred years.

The ability of pines to regenerate in the area so quickly also raises questions about the effects of goats. They state that they have pasture lands, thereby implying that they do have goats. The colonial officials are convinced that goats are to blame for the lack of fresh regeneration in the Troodos forest (e.g. SA1/2080), and yet regeneration occurs with no issues in this area. Either the villages have conscientious shepherds, or there is more to the question of goats and pine regeneration than allowed by the British officials (see Chapter 6 for a further description).

Finally, the petitioners' statements about the application of Ottoman law on the island forces the government to try to ascertain if there is any truth to them. The reader immediately realizes how poorly the colonial officials actually understood the Cypriot situation. Dobbs, the PFO and President of the Forest Delimitation Commission (FDC), tries to defuse the situation by stating that he and his commission "have been most liberal" in their delimitation and "in no case has the '3 years rule' been adhered to". Three days later, he sends a second statement, apparently to clarify his first, noting that he "should explain [him]self by saying that certain small patches of vine cultivation were unavoidably included inside the Delimitation, for otherwise large areas of valuable land under forest would have been sacrificed to the State – e.g. the Trooditissa Monastery with a garden of about 10 donums is situated well inside Gov't Forests…." The FDC also rejected several claims of people with old kotchans (10 to 20 years old) and no traces of cultivation for the last 50 years or so based on the size of the trees[17]. However,

> all such cultivations which were held by kotchans [title deeds] and for which the FDC considered the holders had a legal claim (though situated well inside the forest) were admitted and their claims have been registered and their plots of land marked in the map as private property; and the people are perfectly aware of this for in every settlement the Mouktar and Commission and all persons interested were present (SA1/2090).

[17] These events were occurring concurrently with the Agridha events described above, so although this directly contradicts the policy set in place in Agridha, it does not necessarily represent insubordination by the FDC.

Perhaps reflecting his experiences in India, where the Agriculture and Forest Departments are said to have frequently clashed, Dobbs especially emphasizes that "the FDC have delimited no land fit for corn cultivation". The primary object of the Troodos delimitation has been "to preserve what forests still remain on the high mountains, from further fitful cultivation for vine which simply means ruination to the forests." As for those claims for vineyards which were not admitted, these were fresh clearings which had taken place since the FDC began its work, and "the people no doubt (having heard that the forests were being delimited) thought that by clearing patches here and there they could lay claim to the land" (SA1/2090).

The main government seems to accept Dobbs' response. Illustrating his view of the government's priorities, Warren (CS) reiterates that no land fit for corn cultivation was delimited. In support of Dobb's seizure of the young vineyards, he also emphasizes that the main purpose of the delimitation was to preserve the remaining forests from ruination by fitful cultivation. The villagers who had petitioned were sent a similar summary. There is no recognition that the foresters' hated "fitful cultivation" could actually represent a sustainable land-use strategy within the mountain villages; vineyards were accepted and encouraged in other parts of Cyprus, but they clearly were not desired within the forests. In other words, the implication is that no harm was done, and the forests were potentially saved from destruction by the local Cypriots. The livelihoods of the villagers, or the potential that they had been following a long term management strategy of their own when it came to the forests, are obviously not considered.

However, the elected members of the Legislative Council (i.e., the Christian and Muslim members), are not so willing to close this case. They had sent their own joint petition, signed by all but one, in the midst of the above discussion. They emphasized that although they understood the concerns of the foresters, at the same time they were also worried about potential negative effects arising from the delimitation. In cases such as the

ones above dealing with villages whose inhabitants practiced “fitful cultivation”, they astutely noted that the delimitation would “on one hand, render much more difficult the lifelihood [sic] of a considerable portion of the population of Cyprus, and, on the other, destroy every hope as regards the development of vine-plantation” (SA1/2091).

In support of the villages, the Legislative Council suggests that the British are utilizing laws which were never applied on Cyprus. As they note, they assume that the PFO is basing his actions upon the Ottoman Law that allowed for uncultivated lands to be reclaimed. However, “this provision has never been applied in Cyprus”. Even more, they accuse the Forest Department of applying only those portions of the Ottoman Law that directly suits it[18]. They further emphasize that the Ottoman Land Code does allow for non-cultivation in special circumstances, and surely the lands within the Troodos are one such circumstance, as they need to rest between cultivation. They conclude by asking the government to defer “the final solution of this question which, being so important, affects so much the agriculture and the agriculturalists generally, until more opinions have been taken…” (SA1/2091). Their representation of this issue as an agricultural one with broad implications contrasts sharply with Dobbs’ (and Madon’s) frequent statement that the delimitation negatively affects only a small number of the population. It also emphasizes the inability (or lack of desire) of these early forest officials to fully understand the common Mediterranean polyculture system (see Butzer 1996 for risk management strategies).

The government response to the petitioners also reflects this misunderstanding of land use patterns. Namely, they note that no land was included in the forests on the ground

[18] The legal references are quite confusing within the archival files. The village petition specifically spoke of the “law respecting the lands of 1274” while this petition speaks of “3rd February 79, Art. 103 as well as Art. 91, 97, 98 102”. In the Agridha case above, the QA makes a reference to “Art. 68 Co. de. Pro. For. Leg.”, while Bovill just speaks of a forest law. Regardless of the different references, however, it still appears that the same issue is being discussed in each case – the question of what Dobbs refers to as the “3 years rule”.

that it has remained uncultivated for a period of three years, and certainly no cultivated land for which a title deed was held was delimited. However, "In certain occasions, claims were rejected when the clearings have been just lately made + the claimant had no title deeds to produce – Similarly other claims were rejected by the Forest Delimitation Commission when it appeared that the lands had never been cultivated since the time the kotchans had been issued 10 to 20 years before." It is obvious that the officials think that they are behaving in a just manner in this case. The letter ends with a reminder that any people who feel aggrieved can of course appeal the delimitation within the mandatory six month window. The concerns of the Legislative Council regarding the continuity of vineyards, and their formulation of the concern as one which affect all agriculturalists, are not addressed (SA1/2091).

The above examples set the tone for many of the following cases. As briefly noted in Chapter 4, the FDC continuously refers to the QA for legal advice as to what they legally can and can not do. The QA accordingly provides an interpretation developed from the Ottoman land laws, but the interpretation nonetheless does not allow for the practical realities of Ottoman rule, such as the potential for non-implementation for some of the empire's policies within certain parts of it. Detailed discussions as to what are permissible courses of action often follow. Whether the action carried out by the Forest Department exactly follows that interpretation, or whether they utilize their own interpretation (as seen with Dobbs and vineyards above) largely depends upon the person in charge of the FDC at that time. Concurrently, the Cypriots continue to protest the delimitation by any and all means possible allowing the government to sharpen its skills in avoiding the primary legal issues surrounding the delimitation in their responses to them[19].

[19] As the British identity on Cyprus was constructed around a narrative which emphasized the role Britain would play in "rescuing" the inhabitants from the favoritism-ridden Ottoman system and putting in place

Even at this early date, just two years after the delimitation bill passed, three points can be made about the accepted history. First, as opposed to the authors' comments at the beginning of the chapter that the small, ignorant and apathetic inhabitants did not respond to the initial delimitation, they did indeed respond to it when it was feasible to do so. Unfortunately, their petitions were rarely a match for the ability of the colonial government to bend interpretations and proclaim title deeds as invalid with little effort or oversight. Second, this history further supports and illustrates the inaccuracy of descriptions of the "forest lands" (i.e. areas heavily wooded, lightly wooded, and at times only very slightly wooded if at all) as a "no-man's land", as already noted in the description of Ottoman rural economy in Chapter 3. Third, a level of confusion permeates the majority of the colonial officials at that time about the system of land management on the island. This is somewhat surprising, as the initial Ottoman Land Code closely meshes with the land codes followed throughout the Mediterranean over the course of multiple centuries; although the 1870 Forest Law, the implementation of which is questionable on Cyprus, does represent a unique aspect within this long history. Regardless, the main point remains that the Cypriots consistently describe both above and in later accounts a sustainable method of livelihood[20] consisting of the interconnected practices of animal husbandry, grain cultivation, and fruit tree and vineyard cultivation. The effect that the lack of ability of the British foresters to understand, or alternatively respect, this "traditional" system of land use management had on the forest history of Cyprus cannot be over-emphasized. These points will be further illustrated in the examples below, which look more closely at the topics of monasteries, village commons, and verghi (land tax).

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instead a system which emphasized individual rights with justice and equality for all, an admission of confusion regarding the law structure would have been a serious embarrassment.

[20] As evaluated by their ability to maintain it over the generations.

MONASTERIES, COMMONS, AND THE DELIMITATION

The monasteries represent a special case in this context as the accepted history acknowledges their presence within the forests for centuries, a presence which often is depicted in a positive manner. In many travelers' accounts they are described as having well-maintained landscapes with fruit trees and gardens, as well as goats. These descriptions directly contradict the picture being continuously developed of the forest destroying Cypriot monastery with their goats and woodcutters during the British period.

Madon launches the first attack against Kykko, the largest and most famous monastery on Cyprus, located in the heart of the Paphos Forest, in September 1880 before the delimitation ever begins. He complains about the daily "depredations" of the monks, who think that all one hundred of them[21] can do whatever they want in the forest, as they state that this has been their normal practice. They are setting a bad example for all other peasants by doing so, Madon argues. Further, contradicting the many positive accounts of the area, Madon notes that "The clearance in the neighbourhood of the monastery is certainly entirely due to the reckless felling that has gone on for centuries. The forests are entirely ruined a league round, and one must travel many more to find trees for cutting" (SA1/2150). The degree of ruin perceived by Madon may reflect a difference in the purposes of the forest. Madon is looking for good timber sources, while the monks are likely looking for good firewood sources. In sum, Madon emphasizes that the monastery is more damaging to the forest than many of the villages on the island, and therefore they should be issued a strict warning and closely watched until they realize that they must "respect the laws and regulations for which they have no regard now." Indicative of his own dichotomized view of forest property, he dismisses their claims of ancient forest rights. As he states, they never could have had any, as the Ottoman law only mentions

[21] The same number of monks noted by Bars'kyj in the 1740s (Grishin 1996: 49).

villages and not monasteries[22], and further, even if they had, they have lost those rights by now on account of the damage they caused to the surrounding forests (SA1/2150).

Biddulph's response is not quite what Madon was hoping for, as he informs Madon that there is a chance that the monastery might actually have such rights, and the government thinks that it would be good to know that before undertaking legal proceedings. Therefore, his primary concern should be to determine whether the monastery has any claim or right in or over any of the forest land, or in or over any forest produce, or to pasturage. The steps necessary to determine the answer to that question stretch over many of the following years, to the chagrin of Madon and Dobbs.

As one further illustration of Madon's determination to limit the activities of the monasteries and the conflict surrounding the actual land laws, he next tries to use the uncertainty of the Ottoman Land Code to his advantage when trying to claim the land surrounding Kykko. Specifically, he writes the government in October of 1881 to question whether the portion of the 1870 Forest Law which abolished the original provision that "all trees, whether fruitful or barren without exception, growing naturally on a mirrie land …….can neither be cut nor removed by the proprietor of the soil or by anybody else" was ever implemented on Cyprus. As he argues, the law itself is "only mentioned in a note in the 'Legislation Ottomane' and seems to be almost unknown in general. On this island it is entirely ignored". Further, in support of the idea that the 1870 Forest Law was never fully implemented, he notes that he is "repeatedly receiving petitions from persons, who insist upon cutting wood from their properties" and still feel that they need permission to do so (SA1/2221).

Citing the importance of preserving trees, Madon advises the government to revert to the 1858 Land Code if indeed the 1870 Forest Law was implemented on the island. As he reasons, reverting to the original Land Code rules for trees "would cause the population

[22] This comment is odd – the Ottoman law does allow for more than just villages.

no further inconvenience…and would be but a just consequence of the system of temporary property in force, the temporary proprietor having no right to trees that only attain their real value after many years." Doing so would be especially beneficial for the trees which are claimed by monasteries, "for although these properties belong in principle to perpetual societies, they are managed by monks who attend to their own interests without thinking of the future" (SA1/2221).

Once again, however, Madon's plans are thwarted, this time by the QA (E. Bovill) who informs him that to the best of his knowledge, the 1870 law was applied on the island. Further, although reverting to the provisions prior to the 1870 legislation might be good for the island, this could not happen without special legislation, and the government can not "legislate for such an object though officials in the island my justly appreciate the benefit of such a course" (SA1/2221). Once again one is reminded of the importance placed on legality by the British officials.

Dobbs continues the attack upon the monasteries, although he does not attempt to do so using as detailed of legal arguments as Madon. Rather, he incorporates them into his crisis narrative, and he further complains about them in two articles in the *Indian Forester* in 1884 and 1885. In his mind, the approximately dozen of them scattered around the forests are one of the forester's main nightmares, as they allow their goats to graze with no control and cut wood whenever and wherever they please. In sum, "These monasteries, Machera, Kikko etc. do not exist for any public good, but on the contrary the State would be benefited as far as forests are concerned if they ceased to exist; therefore there is no cause shown why a right should be conceded to them at the loss of the State" (SA1/1894/1885). This statement is particularly disturbing in the context of the

important role the monasteries are said to have played during the Ottoman Period, and presumably still played[23].

Nonetheless, on account of this negative view of the monasteries, they bore the brunt of numerous efforts to delimit the lands around them following the official start of the delimitation. Brief examples from Mt. Sinai (Vasilia), Makheras, and Myrtou, and statements by the Bishop of Kitium illustrate some of these efforts, both successful and unsuccessful.

Mount Sinai Monastery (Vasilia)

As an indication of how fiercely the monasteries fight to maintain their rights as well as how those rights were exercised, the delimitation of the area surrounding the monastery in the early 1880s leads to an appeal in the District Court by this branch of Mt. Sinai Monastery located near Vasilia but often referred to as just Mount Sinai Monastery, or the Monastery of Saitn Paraskeve by Bars'kyj (1996). The District Court appeal is followed by a further appeal in the Appeal Court which ruled in the monastery's favor, followed by a continuation of the case into the Supreme Court which ruled against the monastery. The "manager" (as it is a branch, it does not have a hegumen) of the monastery then sends a petition to the HC concerning the Supreme Court ruling. Through the statements of the manager, it becomes clear that the issue is not whether the monastery had control over the lands surrounding it – it did – but instead if it has an acceptable type of paper documentation to prove this[24].

As the manager describes the case, the monastery has undisputed rights to the land called Korno located nearby it on the basis of a 100 year old hodjet from the Cadi of the

[23] Kykko's annual August festival is said to have attracted scores of people, and served as something similar to a flea market today (for example, see Sinclair 1926).

[24] The British emphasis on paper documentation and the difficulties inherent in obtaining that documentation within the Ottoman system are issues which do not appear in just Cyprus but also in other former Ottoman colonies.

time stating that Korno belonged to them. Further, it has an Ilan (declaration) of the same Cadi which states that the monastery owns Korno, as well as several firmans concerning their rights over the water which runs from Korno. Also, Kitchener, while D of S (he left in 1883), had noted that a merra which shares boundaries with the disputed area of Korno and the monastery's property was their merra. In the manager's words, "We produced evidences testified by witnesses and shewing that this is a property of the Metohion [branch of the monastery], that it was used from the beginning as pasture for sheep, that the Monastery used to get its timber therefrom and that those who interfered with it used to ask a permission for that purpose" (SA1/2451/1885). However, despite all these documents "the District and Supreme Courts deprived us of it, and declared void…a document which was ratified by the Appeal Court and the Defter Hakkani, and by virtue of which the Appeal Court itself issued a decision in our behalf"as well as their other forms of documentation

As the manager further notes, it is unusual for a monastery to have any documents at all, and therefore the mere possession of any reflects their strong privileges through the years[25]. The courts had rejected the documents because they argued "that the then Cadis had no right to issue such documents". The manager, however, does

> not think it is fair that such documents dated 100 years ago, should be annulled for the reason that the then judges had no right to issue them. First, nobody knows whether they had a right or not, and secondly, it appears to me that the Government has no longer the right of annulling them, since they have knowingly respected them for a century, and they did not ask to interfere (SA1/2451/1885).

Biddulph (the CS) decides that more information must be gathered before responding to the monastery, and he asks the QA to look into the court cases. He reports that the

[25] The PFO in October of 1889, Law, also notes that the monasteries usually do not have firm title deeds for their lands while discussing the situation of land ownership around the Armenian Monastery. "[T] he Forest in that neighborhood I left outside the Delimitation because I did not think it fair for the Government to take it from the Monastery, although owing to the haphazard way in which all the monasteries in Cyprus have conducted their business the Monastery might perhaps find it difficult to establish their title to all this land in a court of law" (SA1/1513/1889).

Supreme Court had ruled against the monastery because their two titles to the area were invalid. The Ilan only stated that villagers had no right within certain areas but did not clearly show which property belonged to the Monastery. The hodjet merely stated that the monastery lands were bounded by “Tepe Kornu” but did not show that they had rights over Korno (SA1/2451/1885). However, the QA also emphasizes that this court ruling only refers to their claim to the soil; it does not affect their “power to exercise over it any rights they can prove that they were entitled to previous to the passing of the Woods and Forest Delimitation Ordinance 1881” (SA1/2789/1885).

Based on this information, Biddulph replies to the monastery that he cannot interfere with the Supreme Court decision. The land therefore will remain a portion of the State Forest as the Forest Delimitation Commission considered it necessary to include on account of “the absolute necessity which exists for preserving the forests”. However, even though the land is now in the State Forest, this should “in no way affect the right of the Monastery to the water flowing from Korno or any other right which the Monastery possesses” (SA1/2451/1885). Perhaps wisely, Biddulph does not note that were the PFO to decide to reserve that land (which he does in SA1/2876/1885), the Monastery would lose all of its customary rights over the area until the time at which the area became non-reserved.

While Biddulph and the other colonial officers likely did not have access to Bars’kyj’s account of his travels over the island in the 1700s, it is worthhile to mention his account in this context, as he describes this particular monastery. It is clear from his description that even as early as the 1730s, the monastery already laid claim, which was recognized, to the lands discussed above. Further, Bars’kyj’s description of the area also notes the presence of dense forest, suggesting that the monastery had done a good job of preserving the forest through the years. Thus, the British could pride themselves on having reserved and “restored” a forest in danger, but the historical account instead suggests that the

forest had been in the state the British saw for many decades and was in little danger of destruction (Grishin 1996: 34-35).

Makheras Monastery

The documents concerning delimitation efforts around Makheras Monastery span multiple years and multiple files (SA1/1894/1885, SA1/2265/1885, SA1/3558/1885, SA1/5006/1885 SA1/2289/86, SA1/249/88, SA1/2252/1889, SA1/2357/1890). The forests surrounding the monastery were of high concern to the Forest Department, as several important rivers, including the Pedieos, emerge from the Makheras Mountains. This may partially explain the number of files, but the files also represent the stubbornness of the Monastery. Although the final Supreme Court decision was against the monastery's claims, the comments made throughout the delimitation process as well as the process of declaring selected delimited areas as reserves indicate that like Mount Sinai Monastery, the monastery was accustomed to controlling the forests surrounding it. The comments also indicate some of the more technical issues of the delimitation as well as the continuing importance of individuals, as will be seen below.

The monastery had already been through one court trial concerning the delimitation and lost at the time that the Abbot of Makheras wrote the Forest Department in May of 1885 to complain that one of its merra's had recently been included within the demarcated area. The abbot met with a cold shoulder from both Dobbs (PFO) and Warren (CS), as Dobbs, in line with his views that the monasteries were not important, noted that it was for the benefit of the State that portions of Makheras Mountain be reserved from pasturage. Without doing so, the "State property in this Forest" which is "deteriorating yearly" under the control of the monastery, will soon enough be totally destroyed. Further, according to Dobbs, if the delimitation included part of the monastery's merra,

the monastery has no grounds for complaint, as there is no reason why it should be allowed to keep a larger number of goats than that which the State property can support[26] (SA1/1894/1885).

Biddulph (HC), however, presents a more accepting opinion, although he does allow Dobbs to reserve a portion of it. Biddulph notes that even if the government has established the area as State forest, there is no reason that those who traditionally allowed their flocks to graze in the area should be immediately kicked out. Doing so, in his mind, would only result in the repeal of the forest laws and the dislike of the government[27]. For Makheras specifically, he directly questions Dobbs' depiction of the area as he believes "that this Monastery has helped to preserve trees very much" as "the state of the Machera mountain contrasts favourably with the state of the Troodos" (SA1/1894/1885). Biddulph's description concerning the Makheras forest further serves as grounds to question many of Dobbs' crisis narratives. Dobbs pays no heed to Biddulph's descriptions and instead fires back another even more dramatic statement of the encroaching destruction of the forests (SA1/2265/1885). Fortunately for the monastery, however, Dobbs leaves the island that year before much further can be done concerning the monastery's complaints, and his successor pays more attention to the actual claims of the monastery.

In another file from that year, the Abbot also complains that too many shepherds from the surrounding villages were being given permission to graze within the Makheras delimited forest. Prior to the delimitation, these people would have had to get permission from the monastery to graze in those areas, and the monastery would ensure that the number of goats grazing in the forest remained manageable. Now, however, the shepherds spoke with the Commissioner and not with the monastery to obtain grazing

[26] Apparently as support for his statements, Dobbs also notes that, "This is the principle on which the Reservation of forests in India and other countries has been carried out" (SA1/1894/1885).
[27] As noted in Chapter 4, Unwin several decades later would have done well to have heeded that warning.

permission, via permits, and the Abbot thinks that the rural inhabitants, unaccustomed to such free reign over the forests, could potentially overstress the mountain slopes with the number of their flocks. “The number of Goats in the forest will not consequently be that absolutely necessary for the wants of the people, but will be the extreme number which the forest is able to support…[it is important] “to point out how careful the Government must be in the issue of pasturing permits”(SA1/4652/1885). Once again, it is increasingly clear that the “free-for-all” mountain forests may largely have been a figment of the British imagination, and that customary regulations were in place, especially those set in place by the monasteries as part of the essential role they played within the Cypriot communities[28].

As one final illustration which emerges from Makheras’ legal issues, one can turn to the question of how well the British defined the areas that they had delimited. As the QA had needed to remind Dobbs in 1883, a clear definition of the boundaries of the delimited areas is an essential part of the posted notices[29]. The Makheras example below provides the chance to see how well the FDC is doing by 1885.

Grant (now the PFO and the D of S) visits Makheras in November of 1885 to look into claims by the Abbot that two of its mandras were included within the delimitation and declared to be reserves. His findings suggest that there certainly was a level of misinformation within the government about Makheras, whether purposefully being

[28] Note that during the Ottoman Period the church worked with the Ottoman government in questions of tax collection, so the monasteries, while playing a large role in the communities, have not necessarily played a philanthropic role.

[29] Dobbs had finished delimiting the Troodos Range at the end of 1882, and he had placed notices that the 21 villages which “march with the Troodos Forests” would have six months to file an objection to the delimitation. Unfortunately for him, he did not follow the stipulations of the law in creating and putting out the notice, and the QA (Smith) forces him to repeat the entire notice process, setting back Dobbs’ work within the Troodos for an additional six months from the date that the new notices were issued. While this delay likely annoyed Dobbs, the reasons why the QA made him repost the notices also are telling. Dobbs had neglected to include the boundaries of the land as well as where the villagers could go to protest the inclusion of their land in the notices which he distributed. It appears that Dobbs either did not think anyone would protest the delimitation, or more likely, he wanted to ensure that no one would protest it (SA1/2080).

created by the Forest Department or occurring inadvertently. His first investigation topic supports the Abbot's complaints concerning the size of the pasture land the Forest Department had left the monastery. The issue centered on a question of names. The Pedieos River was utilized as a boundary marker. However, the river splits into two branches and crosses on either side of the monastery. The one branch goes by the name Pedieos, while the other branch goes by a different local name to distinguish between the two. The reserve notice referred to the branch with the local name, although since the notice referred to it as Pedieos, the monastery thought that it meant the other branch (SA1/4652/1885). The monastery was able to catch and correct this mistake because of its power, but one must wonder how many times similar mistakes went uncorrected during the creation of reserves or the prosecution for breaking the rules of the reserves by less important people.

Grant's report also contradicts the earlier account in terms of the location of the mandras contained within the reserve. The initial report stated that there were two mandras, and that they were located at a very high altitude in an area within the reserve which it was essential to protect. Grant only reports that one mandra is included, but this mandra "is an important one and the chief one belonging to the Monastery…it is placed at a comparatively low elevation and is essential to the Monastery for use during the lambing season". He recommends that the reserve boundaries be altered so as to remove that mandra from it (SA1/4652/1885).

Thus, this example from Makheras illustrates the monastery's former role within the forest area, questioning the British interpretation of a forest unregulated commons. The monastery's warning regarding a sustainable stocking number of goats is telling, as that type of knowledge directly implies that they indeed had been managing the area. Finally, this example also lends doubt to questions concerning the accuracy of the delimitation efforts. In this instance, the monastery was able to force the government to correct several

mistakes, but it is doubtful whether less important Cypriots without the same reasons would have been able to force the government to fix any other mistakes.

Myrtou Monastery

A case from 1886 involving Myrtou Monastery serves to further illustrate the issues with understanding the land law during the delimitation period. The acting PFO (Bovill) is trying to find clarification within this file as to the rights associated with an area considered to be a merra. Myrtou Monastery has been not only grazing their cattle on the merra, but also cutting, burning and grafting trees. Bovill wants to know if they have the legal right to do so (SA1/4001/1886).

The QA responds by making a distinction between public and private merras. If the merra is private, then they can cut trees. If the merra is public, then they cannot. His answer seems straightforward enough, but neither he nor the D of S (Law) can definitively state which type of mera the monastery holds. The HC (Bulwer) decides that "There seems to be such an incertitude in this matter that we had better leave it alone and say nothing about it at present" (SA1/4001/1886). It is not difficult to see that in a different setting with a cast of characters not as sympathetic to the monastery, this issue could have played out much differently.

Bishop of Kitium, 1885

The Bishop of Kitium, a Legislative Council member, complains in 1885 that the Forest Department had delimited lands which belong to the monasteries as State Forests "by the arbitrary fixing of cairns". They have done this in some instances although there have never been any State Forests anywhere near the monasteries in question, such as

with Stavrovouni[30] in Larnaca District and the Ameron Monastery in Limassol District. He further points out that the ownership of the lands surrounding them has been maintained for centuries, and the "facts justify" this claim. "Instead of contributing to the destruction of the wild trees and shrubs grown on them", the monasteries have been able to preserve until the present the forests surrounding them because they protected them from the "greatest of evils inflicted under the Turkish Government, viz; that of wilfully setting the Forests on fire"[31]. The Bishop further argues that the uncultivated tracts of land which the British see today are much larger than they were in the past on account of the shortage of available labor in the past, and therefore the lack of current cultivation cannot be utilized as a valid indicator of ownership or not (SA1/3787/1885).

The Bishop's arguments are not illogical. Despite Madon's and Dobbs' negative descriptions, the mountain monasteries have frequently been described in positive terms (see especially Bars'kyj's account (Grishin 1996)). Further, since traveler's accounts in the 1800s especially emphasize the lack of cultivation on the island, it is not implausible that the lands of the monastery would also have fallen into some disuse during this period as well. Hill (1952) suggests that some of the monasteries were having financial difficulties during the Ottoman period, and although it is just speculation, that may have also altered the amount of land cultivated. Unfortunately for the Bishop, however, the Forest Department did not always view the monasteries in the same positive manner.

Villages and Commons

The above examples have shown how the monasteries stated that they had control over the forest areas around them during the Ottoman period. However, the discussion

[30] This comment is interesting in connection with the travelers' accounts, which often describe Stavrovouni as both wooded and deforested. It appears that the Abbot is arguing that those forests which some of the travelers saw were actually owned by the monastery?

[31] The Bishop is obviously aware of the accepted environmental history and is using it to his advantage in this example.

should not be limited to monasteries, as it also appears that villages would have retained control over the forest areas near them. As one brief example, in 1889 shepherds from Ayia Lilas, located in the Nicosia District, petitioned the High Commissioner for help in limiting the amount of grazing by others on land that they regarded to be their village merra, strictly reserved for the use of the flocks and animals of their village. These other cattle (presumably sheep or goats) were not only preventing the village cattle from grazing, but they also were bringing new diseases with them that the Ayia Lilas' flocks contracted from the watering sites (SA1/1095/1889).

The British illustrate their lack of understanding about community commons in their reply to the petitioners. This reply argued the government's points along the following lines: You possess no exclusive rights over that pasture ground. We, the government, gave out permits for about 200 cattle from hill villages to graze in that area[32]. These cattle are not diseased, and they do not hamper your grazing (SA1/1095/1889).

As another example, a group of shepherds with goats and sheep from the Kyrenia District send a lengthy petition to the government requesting permission to graze their flocks within the forest. The text of their petition provides not only information about their past style of livelihood, but also indicates the hardship already being caused by British policies. They note that

> Under the Turkish Rule + even under that of the English (under the latter for some three or four years only) we had enjoyed our rights to graze our flocks in the pasture grounds round our villages and considering that many a fruit bearing tree within the said grounds belongs to us and the others of our villages, we should and ought to take every particular care that no damage whatever either by fire or otherwise take place (SA1/2178/1889).

They state that they had these rights for many years, and they considered these lands "almost as our properties".

[32] It should be noted that these hill villages likely already lost their own grazing area to the forest delimitation, hence their need for permits to graze in the area which had traditionally been utilized by Ayia Lilas.

> We, in no way, wish to suggest that Government were not entitled to take proper measures to guard the Forests from damage, but, Your Excellency, the boundaries in many a case have been fixed so close to our villages themselves that leave no room whatever for our flocks to graze. There are plenty of parts round our villages in which very few pines or cypresses are grown and where the most of the trees are olive + charcoal trees belonging to us + others of our villages. Why, Your Excellency, should we not be allowed to enter therein? Is it possible or even to be thought of, that we would not do our best to prevent any damage since we have such strong reasons to guard these parts from destruction (SA1/2178/1889).

The shepherds are not successful in their request (nor were the four previous petitioners requesting grazing permits). As Bovill notes, he believes that the forests are finally beginning to show the result of excluding goats thanks to the forest reserve in that area created in 1885, and the government cannot risk that the new growth be ruined by shepherds. No mention is made of the inhabitants' statements regarding their desire to protect the forest or the previous rights they held.

To summarize the two sections above, these files directly counter the accepted history of the forests as a common open to all to use and abuse. Rather, there was a regulated system of grazing in both forest and non-forest lands. The monasteries likely had influence over the forest areas surrounding them, while the villages presumably would have had control over the pasture lands or forest lands near them (and Ottoman law even allows for such control, although the British appear to have adopted merra land as hali land). The British practice of reserving the forest areas from shepherds forced the shepherds to either sell their animals or to find new grazing areas elsewhere. In some instances, as discussed in Chapter 6, this created a conflict situation which previously did not exist as the shepherds encroached upon village lands. Thus, in the process of claiming the forest, the British functioned under a false assumption concerning who had rights in the forest previously. This misunderstanding in turn allowed them to believe that they were acting in a legal and just manner.

VERGHI

Not all of the villagers were able to protest as easily as the monasteries concerning issues with the delimitation. Some inhabitants lived far from the courts[33], but just as importantly, there was also the question of cost. A court fee was charged for each appealed case, as well as a fee for verifying the resident's claims in the survey dept registers. Bovill suggests that in the Paphos district those fees could equal as much as 12s/- by 1889 (SA1/807/1889). On top of that, there was the question of whether the inhabitant even knew that his/her land had been contained within the forest. Bulwer asks this question himself in 1886 and he receives a reply from Cobham, then the Commissioner of Larnaca, that it is unlikely that the notices posted would have been sufficient to alert the rural people to the proceedings (SA1/1619/1886). The unstated argument in these statements center on the fact that officially the inhabitants only have 6 months to protest the delimitation before it becomes final – it appears that in the minds of some of the colonial officials, even though they recognize these difficulties, if the poor notification allows them to make it through six months without complaints, then they might as well use it to their advantage, as soon the legal window for complaints will have passed.

However, the payment of the verghi (land tax) provides a tangible item with which to question the delimitation, even after it is finalized. Officially, one could only pay verghi on pieces of property for which one actually held title deeds. Nonetheless, following the delimitation, large numbers of villagers who had either not been able to protest the delimitation, or had protested the delimitation and failed (following the favorite excuses of the FDC, such as that perhaps their title deed was too old, or too inexact, or there were

[33] In the 1880s, the Forest Department is told not to bring cases against certain residents in the Troodos during the spring as they could not physically travel to Nicosia during that period because of flowing streams (SA1/2173, SA1/2174). In 1928, there were still some villages which were located more than 50 miles from the district court (SA1/750/1915/1).

trees upon their land), began pointing out that they were still paying verghi on this now delimited land which they could not touch. In the beginning some of the villages were refunded the excess verghi paid (but not the area within the delimited forest), although Bulwer in the mid 1880s had to strictly remind the colonial officials that since they had made a mistake in the delimitation, it was their responsibility to help the villagers to fix it (SA1/2385/1888, SA1/3286/1888, SA1/2245/1895). Other villagers continued to pay the land tax for years thereafter, either because they believed that it would protect their rights to re-claim the land at some point time or because they could not afford the court fees to question it (SA1/1164/1914, SA1/1619/1886).

This problem with verghi is therefore one which continues for multiple decades. As Bovill notes in 1914 when referring to Lyso villagers on the western side of the Paphos Forest who were in need of land, even though they were paying verghi tax on land which was within the delimited forest.

> It does seem to me rather hard that Govt should be collecting taxes on land which the people cannot touch without being prosecuted + fined and that if they want to get rid of the tax, they have to pay considerable sums (for them) when they have little or no chance of getting a refund of the taxes they have paid for periods, according to the forests as delimited, of 15 to 32 years (SA1/1164/1914).

It does sound a bit harsh, indeed, but the recognition of the inconvenience of the multiple fees associated with the legal system for the villagers is not enough to force a system-wide reform.

Livadhi, an infamous Tillyrian village

The village of Livadhi clearly illustrates these issues with verghi, as well as the FDC's loose interpretation of forest. Livadhi is a village located in the Tillyria region in the northwest portion of the Paphos Forest. It will become famous in the 1920s for its supposed fire-starting shepherds, but in the late 1880s it was simply a village attempting

to reobtain land which had been delimited as state forest land in 1886 by the government. In 1889 one of the village members filed a petition concerning the lack of arable village land as well as asking for help in reconstructing their church, as they did not have the means to do so themselves. As the petitioner explains, when the Forest Department had delimited the area three years prior to this letter, it had placed the forest cairns right next to their houses, without leaving them any ground for cultivation (SA1/1472/1889). As seen previously in this chapter, this complaint about the over zealous delimitation of the lands directly around villages is a common one.

The HC requests that Law (the PFO) draw up a report on Livadhi. In his report, Law suggests that they are exaggerating about how little land was left, especially since Livadhi is a small village and is primarily involved with goatherding and not agriculture. The assumption appears to be that the two are mutually exclusive of each other. He further notes that it is true that land around their village was delimited, but it had not been cultivated at the time of the delimitation, and the inhabitants could not produce that all-important title deed. Further, while Law did verify that the FDC had delimited approximately 235 ½ donums (just under 80 acres) of land upon which the Livadhiotes had traditionally paid verghi tax (thereby implying that the villagers had some claim to this land in the past), Law also noted that the British government had refunded them for any excess verghi paid following petitions in 1888. Therefore, Law did not see how the residents could have any additional valid complaints. Law's wish for the village would become a common wish among many officials - "I only wish that in the interests of the Paphos forest this small village which is situated well inside it could be got rid of altogether by removing the inhabitants elsewhere" (SA1/1472/1889). It is clear from this file that Law assumes that they would not have a need for land because they were shepherds, and further, their need for land does not matter, as the final goal should be to move them.

The Commissioner of Paphos, who reports on the situation a month after Law, states that the villagers used to all be woodcutters, as opposed to shepherds, but now the government has prohibited their livelihood, so they are not doing as well. This switch in the typical livelihood could suggest a variety of things. Perhaps the government's informants are poor ones and provided them with inaccurate data, or perhaps there are more fluid boundaries in the definitions of livelihoods than the colonial officials allow. Stepping aside from the skewed information, there are a total of 25 families, 10 of whom have sheep, in the village. The families each had a garden with mulberry trees and silk worms in the past, but this had been swept away by the river (SA1/1474/1889).

Regardless of this discrepancy in the livelihood thought to be practiced by the Livadhiotes, the end result is still the same in this file. The Forest Department wants to remove them from the forest, and Law specifically surmises that even if they gave the inhabitants extra land, they would just cut down the trees and sell the wood and then expect another quick fix (this is of course a highly stereotyped view of the locals). Further, the soil is so poor in that area, he argues, that agricultural activities would not be profitable without a large area of cultivatable land. Warren (CS) suggests resettling them at Orites, a piece of scrubland which had been initially claimed by the Sultan to the west of Limassol, but Bulwer (HC) declares that the suggestion of moving them, regardless of where, is out of the question unless the villagers themselves desire to be moved (SA1/1472/89).

Despite these conversations about the fate of the village, it obtains little relief until 1893, when the Forest Department offers to lease them delimited forest land for cultivation at a rate of ½ cp per year (SA1/2937/93). Evidently Law has decided that the soil which he previously had declared to be too poor for agriculture could now be agriculturally productive. The irony in this situation is strong. The Forest Department is leasing them land for cultivation which is supposed to be delimited forest land, which by

definition should imply the presence of trees. However, the trees must not be there in sizable numbers, for if they were the department would not allow the area to be cultivated. Further, this land the Forest Department is willing to lease them to cultivate appears to be the very same land the Livadhiotes had initially fought in the 1880s to reclaim as their own following the delimitation.

DELIMITATION REVISITED

The examples above of land being delimited based upon false assumptions of previous use as well as the impact on the inhabitants of this delimitation and the concerns regarding continuing verghi payment illustrate several of the common issues arising with original delimitation. Further, these issues continue over the years, so much so that as one example, between 1910 to 1911 Bovill notes that he had inquired into 960 claims in the Karpas alone concerning delimitation. These Karpas villagers were also still paying verghi, but they refused to stop paying it as they argued that it gave them a legal right to the land. In this case, the inhabitants were lucky, and the court did side with them (SA1/1134/1910). More generally, though, what was happening with the delimitation? Had it not been successfully completed by the mid 1890s, as the accepted history records?

The initial delimitation had officially concluded in the mid 1890s, but it was already facing troubles before it ended from some of the island's courts which had sided with the Cypriots and viewed the procedure as inherently flawed. The Supreme Court had stated as early as 1891 that the delimitation could be amended even after the six month binding window. The accepted history that the inhabitants did not appeal the delimitation because their numbers were small and they were apathetic and ignorant was certainly not the case. Rather, the limited number of appeals reflected inherent British flaws in carrying out the

delimitation such as not posting the delimitation notices in public enough areas, delimiting land which was privately owned, or even coming back to delimit an area second time without fully alerting the residents of their return. The mudir of the Karpas was lucky enough to reclaim his land after the FDC delimited it, even though six months had passed since they had done so, because it was the second time the FDC had been in the area delimiting land and the FDC itself admitted that it would have been easy to not realize they were there (SA1/2777/1893). However, it is doubtful that the average rural inhabitant would have been so lucky.

The Legislative Council was also vocal throughout this period, and frequently complained about the delimitation into the 1900s and 1910s, especially following the arrival in 1904 of King-Harman as HC and his promises to look more fully into the resident's petitions. By 1915 the initial delimitation was under such attack from all sides that a lawyer went so far as to argue that the entire procedure was illegal because neither the 1879 nor the 1881 law applied to private property. Therefore, the private property owners were neither required nor compelled to bring any objections before the court while it was occurring and could not be held to any of the law's provisions now that the delimitation had ended (SA1/717/1915). Needless to say, many delimitation claims were being overturned during this period, and there was also much confusion and/or disagreement between the government departments as to what exactly to do with the people and the property following the court's ruling[34]. The issue remains one of concern until the forest law is revised in 1939 and an additional, binding delimitation is stipulated as part of the new law.

[34]During this period of confusion, the Survey Department and the Forest Department realize that they have been functioning under very different interpretations of what to do with delimitation claims over the previous decade, an incident which speaks as loudly about intra-departmental communication as it does about the state of the problem at that time (SA1/717/1915)!

SUMMARIZING THE FOREST CLAIMING PROCESS

Observing the delimitation process with an outside eye today we might question the fairness of the British policies in this aspect – requiring what we are to assume are rural, illiterate peasants to recognize that the delimitation is taking place, read the statement of delimited areas which was to be posted in the villages, and also understand the place names utilized by the British. Further, if they discover that their land was inadvertently delimited, they are expected to not only pay the court fees to bring the case to court, but to also take time from work to make the trek to the closest district court themselves. Put into that context, the delimitation does appear to have been rather harsh.

In the accepted history, however, this is presented as fair, with the government only realizing later that the inhabitants might not have fully understand the process. This concept is echoed by Gordon, who presents the delimitation process as one in which with the benefit of hindsight the colonial government learned many important lessons, including that the delimitation should "have received the greatest possible local publicity, that settlement proceedings should be held on or near the land affected, and that facilities should made for claimants to voice their objections without the necessity of incurring legal expenses" (Gordon 1955:409). In other words, as the history is received, the British realized after the fact that they should have done some things differently, and the reopening of the delimitation in later years can be perceived as a sign of British benevolence and understanding that, looking back on the process, the locals might not have understood what was happening.

The archives present quite a different story. At least some of the colonial officials are aware of the fact that the inhabitants are not fully sure about what is happening, but the decision is made to keep quiet about it as the delimitation is proceeding smoothly thus far. Further, the people are not all ignorant and apathetic. In fact, the petitions against the delimitation begin almost immediately. It is true that some of these petitions do emerge

after the six month window for complaints, but there are also some inside the six month period. It is apparent that the Cypriots are concerned about the process and actively trying to fight it. It is not from a lack of trying, but rather strong resistance from the colonial officials that many parts of the forests are delimited. The initial British supposition that the forest lands or potential forest lands should all be state owned reflected a misunderstanding of customary land use on the island. This misunderstanding appears to have had wide impacts, as the British actions to “save” the forests by delimitation and claiming as State property disrupted the system of land use which had preserved the forests until that time.

Chapter 6: Goats and the Cypriot Experience

> If legislation could be got to deal with the evil of goats, the regrets of the comparatively few goatherds would be lost in the acclamations of the great mass of industrious husbandmen who at present suffer great loss from depredations in their fields and vineyards, but dread the vindictiveness of the lawless and daring men whose life is spent in tending their own flocks and robbing the flocks of others and living upon the produce of the cultivators …. It seems to be a war between these creatures and civilised man, and as the goat at present has the law on his side, it would appear probable that unless a change in this law is made the matter will end by the victory of the goat, a proof that under the proper protection of the law as administered by a progressive and free nation an animal not carnivorous has a fitter right to survive than domesticated and obedient man (CO 883/4, Report by Warren 1884).

Within Cyprus' history, issues about goats[1] pervade almost every file, regardless of the topic. Goats are the primary connecting thread between forests, agriculture, and the overall rural economy, and it is impossible to discuss the history of the island without discussing them (see Fig. 6.1 for a sense of their millennia long presence on the island). As illustrated in the above selection, the accepted history presents the goats and shepherds in a negative light (see Fig. 6.2). The goats are assumed to eat the new vegetation (whether in the forests or in farmers' fields), the shepherds are assumed to light fires out of spite as well as to improve the pasturage for their flocks, and the overall combination is said to spell ruin for the Cypriot economy. The simplified flow chart followed by the colonial authorities and drummed into the Cypriot public takes on the following appearance:

1. The economic future of Cyprus lies in the productivity of its forests and its cultivated fields.

[1] While sheep are present on Cyprus, they are not usually found in the mountain villages. The omnivorous appetites of the goat, combined with its close browsing ability, allow it to thrive to a much greater extent than a sheep in the rough mountain setting.

2. The cultivated fields will not be fully productive without water; water can only be retained by preserving the forests and can likely be increased by expanding the forests.

3. Therefore, free-range (i.e. not tethered) goats not only destroy the forests' productivity and prevent the expansion of forests, but also that of the cultivated fields on account of the lack of water.

4. Further, the owners of these goats are a drain on society; they own no land, and yet they are allowed to destroy State Land (supposedly held for the benefit of all) thereby negatively effecting the law-abiding, property holding citizens to an immeasurable extent. The shepherds are "parasites".

5. Removing the goats from the forest will not solve the entire problem, as the forests might be able to recover and rainfall might improve, but their landless shepherds will simply allow the goats to graze on the cultivated fields of the property owners to an even greater extent than they already do.

6. Therefore, the free-range goat herding lifestyle must be phased out. This will harm no one but the shepherds, who already are drains on society. Free range goats may be replaced by tethered goats, or preferably by sheep and/or cattle. Any lost products from the reduction in number of goats will be more than countered by the increased productivity of the rest of the island.

7. The shepherds should be converted into productive members of society. Preferably, they will be converted into hard working agriculturalists.

8. By following these steps, the productivity of the forests and cultivated fields will be protected and improved, and the island will be guaranteed a shining future.

In this chapter, these assumptions regarding goats and shepherds and their relation to Cypriot society are examined. Were the goats and shepherds viewed as "parasites" by the average Cypriot agriculturalist? Was there a dichotomy between the agricultural and pastoral economy? Did the British fully understand the place of goats in Cypriot society, or were they simply following common stereotypes at that time regarding goats and forests? The sections below present a chronological overview of the situation centered on several key themes and events.

EARLY HOSTILITY

The goat and its shepherd were already under attack on Cyprus before the arrival of the British, as seen in the account of de Montrichard. The situation did not change post 1878, and by the early 1880s, Madon (the PFO at the time) was calling for the gradual exclusion of goats from the mountains. As Thirgood (1987) states concerning Madon, "He was the first and most uncompromising enemy of the goat, setting a pattern that all Cyprus foresters have followed unwaveringly…." (94-95). Madon firmly blamed the goats for the lack of P. brutia regeneration (Madon 1930 [1881]), and, like his later counterparts, was not just anti-goat, but also anti-shepherd, as the shepherds installed "themselves for weeks and months in the forests, lighting fires and putting up habitations. Both the woods and the game are destroyed by these people" (SA1/1837).

Dobbs (PFO) strongly and perhaps more fervently echoed Madon's concerns with the goat and shepherd, devoting most of his efforts to convincing Biddulph (HC) to allow him to create reserves free from pasturage within the newly delimited forests. For Dobbs, timber and fuel are more valuable than the milk, cheese, and meat of goats[2]. As this is so, he is particularly concerned with limiting the number of goats; "The object must be to check and in a measure put a stop to those who 'trade' in Goats, and oblige them to trade in sheep or to take other means of making a livelihood" (SA1/3256/1884).

As noted in Chapter 4, Biddulph hesitated to give Dobbs' permission for the reserves. This was not because "his Administration, like later ones, was not prepared to grasp fully the nettle of forest protection" (Thirgood 1987:100), but rather because of his concern with keeping public opinion positive regarding British rule. As discussed in Chapter 4, Kimberely had recognized in 1882 that the Forest Department was already not popular

[2] A report from the Commissioner of Nicosia also tries to make the argument that the goats are not important for the Troodos villages as "strictly speaking, none of them make a living as shepherds or owners of goats (sheep they have none)" (SA1/2692/1884). Whether or not they make a complete living from their goats, he, like Dobbs, does not allow for the goats to play any essential part in the rural economy.

among the inhabitants. Much of this unhappiness, he suggested, stemmed from the department's treatment of goats. Biddulph had suggested that 180,000 goats out of a total of 210,000 grazed in the forests, and therefore Kimberley correctly surmised that these goats must

> furnish the means of subsistence to a large fraction of the population. Any attempt to suppress them would therefore inflict very serious hardship, and indeed in some cases bring ruin on their owners, who, seeing themselves and their families deprived of their sole property, might be driven by despair into open resistance to authority. Some less stringent measures for reducing the mischief wrought by the goats might however be taken….This lawless and mischievous practice [of grazing on young trees as well as in vineyards and cultivated lands in the plains not owned by the flock owner] might be checked by passing an ordinance requiring goat-herds and shepherds to be licensed[3]….Sufficient notice should be given to the shepherds [with no land or rights to village grazing lands] … to enable them to get rid of their flocks or to arrange to settle in some village community. The repression of the goats is, however, a matter in which the inhabitants are so much concerned that I do not think that any measures should be adopted until the whole question has been considered by the new Council [i.e., the newly elected Legislative Council] (No. 61 in Correspondence 1882: 104).

It appears that both Kimberley and Biddulph have a valid reason for concern, based upon the above account. An example of Biddulph's sympathy for the native inhabitant, as well as one of the earliest clear examples of the role of the goat in the Cypriot rural economy, can be seen within an 1885 file concerning the Commissioner of Kyrenia (Kenyon). He had requested that he be allowed to grant grazing permits in areas of the Northern Range which had been delimited and were among the first to be reserved. Much as Given (2000) did when discussing the Ottoman economy, Kenyon makes a distinction between full time shepherding and village based herding. For full time shepherds, the pieces of pasturage left outside of the reserved areas are sufficient, as they can be expected to move with their flocks.

> There are however also persons in every village who own smaller numbers of animals which they entrust to the care of a shepherd but whose produce is an important item in their food supply. These persons having their local trades or

[3] As discussed below, a Shepherd's Licensing Law was finally passed in 1935.

> lands to attend to cannot migrate for the sake of their flocks, + it is to meet such cases as these that I propose the two small concessions in question, both of which are for the benefit of villages where the adjoining available pasturage is very limited + insufficient in my opinion for the actual needs of the residents (SA1/2575/1885).

He concludes his report by noting that he has not brought to the HC's attention all the complaints that he has received, as to do so it would result in reopening all of the reserved forests, but he does hope that the concessions he recommended will be granted "[F]or it is, in the interests of the forests themselves, desirable not to create greater discontent with the forest laws than absolutely necessary; and also, considering the ordinary food of Cypriot villagers, it would involve real hardship in some cases if too sudden and too great a contraction in their available pasture grounds is enforced (SA1/2575/1885).

In the ensuing discussion as to whether the Commissioner's requests should be granted, Warren suggests that the Commissioner has not thoroughly investigated the situation, as "The more he makes personal inspection + enquiry the more he will discover that the pasturage within the reserves is unnecessary to the natural wants of the inhabitants as it is harmful to the interests of the general public." It is unclear why Warren would have more knowledge of the area than the Commissioner, if he even does, but more importantly this displays once again the effect of individual attitudes. Biddulph, on the other hand, essentially silences Warren's complaints by authorizing the Commissioner to issue temporary permits in the two areas which he had initially requested (SA1/2575/1885).

One should not confuse Biddulph's leniency with sympathy regarding the role of the goat in the forest, however, as he firmly believed that goats and forests did not mix. In 1885, the year he was initially planning on leaving the island, he published a Memorandum on the question of goat grazing and forests. This memorandum emphasized that whereas previous "reckless and wasteful felling and tapping of trees" had caused

some damage, “a far more serious injury” had occurred because of goat grazing. “These animals devour the young seedlings, and after a lapse of some years their ravages suddenly become apparent by the total disappearance of the Forests.” Darwin’s account of the role of goats in destroying the forests of St. Helena and the following climatic consequences is provided as an example of what can happen if something is not done (SA1/ 2810/1885).

Biddulph continues by noting that “The government is aware that many have enjoyed the privilege of pasturing flocks within the forest over the years, and if a “real legal right to the enjoyment of such a privilege” can be shown, “such as a right will of course be respected by the Government”. However, “the indiscriminate pasturing of goats by the public in the State Forests has already destroyed the outer portions of the forest nearest to the villages and monasteries”, and these communities now have no right to practice their customary rights further into the forests. As Madon frequently argued,

> Nor indeed can any one claim a right to exercise a customary privilege in such a manner as to destroy the land over which such right is claimed….it behoves [sic] the Government, as the guardian of the rights of the people of Cyprus, to take care that communities or individuals who attempt to exercise rights which they claim to have acquired by custom, do not in fact encroach on the rights of others (SA1/2810/1885).

If the forests are “totally destroyed, nothing can replace them…there will be no longer either pasturage or fuel on the mountains, and nothing but bare rock will remain” (SA1/ 2810/1885).

However, if the forests are protected from the “complete destruction which threatens them by the indiscriminate pasturage of goats” and they are extended, “pasturage will increase in the valleys and plains, and an abundance of wood will be provided” for all the Cypriot needs. It is for these reasons that the creation of reserves has been necessary, “so as to admit of the young trees springing up to a sufficient height to preserve them from destruction”. Once the trees have recovered, the reserved section will be reopened, and a

new section closed. Grazing will be permitted in those open sections by permits issued by the Commissioner of the District (SA1/ 2810/1885).

He concludes by noting that he "appeals to the people of Cyprus to aid the Government in preserving the forests for the use of the inhabitants and of their children who will come after them." As he is leaving soon, "it is in the interests of the people alone" that he urges them to realize that the "rights and property of the whole Island should not be sacrificed for the imaginary interest of a few persons." While he does not expect the majority of the population to be able to "realize the wide-spread loss and injury to agriculture that will caused by the destruction of the forests", the "results are well known in other countries, and it is the duty of the Government …to endeavour to preserve this Island from similar disasters" (SA1/ 2810/1885).

In the minute papers, Biddulph stresses that the most important task is to get copies in Greek distributed among the hill villages, "and also amongst the Greek community who are the chief persons who petition about forests"[4]. However, he states that it is acceptable to delay the Turkish copies, especially as the press is busy with other work (SA1/2810/1885).

One almost could imagine Biddulph's masterful argument in support of limiting goat grazing being utilized today. He follows all the key strategies – he points out dramatic examples of what will happen if a change in action is not followed, stresses that only a few are ruining the lands for the whole, emphasizes that the Government is just doing this to protect the people's land from harm (i.e., they are holding it in safe-keeping), accentuates that one should want to do this for the future generations, and finally, to be sure that all pay attention, he ties it directly into the primary industry on the island –

[4] While it is true that many petitions which I found within the archives were by Greeks, there were also some by Turkish Cypriots. Therefore, Biddulph's contention that it the hill villages are primarily Greek and that the Greeks are most vocal in their complaints would need further research to prove or disprove. Census data does show that the Pitsylia area (at the SE of the Troodos) is almost completely Greek, although in the NW of the Troodos range, one can find many Turkish villages.

agriculture. Unfortunately for Biddulph, however, he has to deal with the Bishop of Kitium, who appears to see through much of his eloquent argument. The Bishop replies to Biddulph's notice in the following manner[5]:

> The object [of forest conservancy outlined in the notice] is very good indeed, but it appears to me that the verdict does not entirely agree with the facts, and the measure adopted by the Government which are now being justified are not the most suitable ones, nor are they so indeed in regards forest lands belonging to the Monasteries.
>
> The meras that the P.F.O. included within his cairns, are near and amongst most mountainous villages of the Island. These villages (which have by their Petitions in vain protested against the action of the Government) situated on poor lands suffer …[How can these villages] continue to grow caroubs, oil and wine and transport their product to the towns after being deprived of the means of subsistence of their animals the common meras of which the Government has confiscated by merely placing a few cairns…" (SA1/2810/1885).

Further, for these mountain village inhabitants, they gain "their living from their very toilsome labour, and indeed most of them are full of debts". They are heavily dependent upon the cheese and meat they can obtain from their herds, as well as the beans that they grow, in order to prevent starvation.

> When therefore the merras of the communities are confiscated and the pasturage of goats in them is prohibited (in the mountainous villages sheep can not prosper) and under the provision of the Field Watchman's Law[6] the villagers are not allowed to pasture their goats (because it is to be against the general principles of economy) in the vineyards, in the Fields and in the private plantations, then the resources from which the villagers obtain the above mentioned articles of food, as well as the skins by which they transport their wine and oil, and the skins used in making their coats, will be so much diminished, that these articles will become very scarce and consequently they shall be obtained with great difficulty (SA1/2810/1885).

The effect of disallowing the villagers to pasture their flocks in the village merras as well as charging them to graft wild olive and carob trees "will cause a real and direct

[5] The entire letter is covered with handwritten combative comments regarding almost every point the Bishop makes within it. Unfortunately, the comment writer did not sign his work, although the hand writing was similar to that of Warren's. Whoever the person was, they were exceedingly unhappy with the Bishop's letter.

[6] The Bishop notes that he does not mean to completely deride the Field Watchman's Law, as it was necessary to pass in certain areas.

injury to agriculture in general, as also to the public treasury, an injury I say which will be very much greater than the indirect benefit which is expected to be derived in the far future from the steps taken" (SA1/2810/1885).

These two selections, the one by a British official (the commissioner of Kyrenia), the other by a powerful Greek Cypriot religious figure, strongly question the over-simplified picture of destructive, lawless shepherds relied upon by the foresters. Unfortunately, these accounts were largely ignored. Ironically, it is the Bishop of Kitium himself who is partially responsible for one of the first laws which complicated the life of the goatherd. He introduced the Field Watchman's Law in the Legislative Council in 1884 a year prior to the above petition and two years before his death (hence the care he takes to not overly complain about it above), and it was passed in 1885. This law set in place the framework for each village or set of villages to hire a guard for their cultivated fields and fruit tree plantations. The law goes through several revisions over the years, but it always remains a key part of the Cypriot economy, as it assumes that a conflict exists between the farmer and the shepherd, and it gives the upper hand to the farmer.

CONTINUED DIFFICULTIES: THE PROGRESSION OF EVENTS INTO THE 1910S

A report on the indebtedness of the Tillyrian villages (located in the NW of the Troodos Range and long depicted as lawless) sheds additional light on what was actually occurring on the ground. In 1894 Young (the CS) requests that the Commissioner of Nicosia visit the rural Tillyria region to ascertain whether the inhabitants were having any issues with money lenders or debt. The Commissioner reports back that the villages are not in debt, but that is mainly because no money lender is willing to take the chance of loaning them money. The money lenders are evidently aware of the stereotypes surrounding the Tillyria region. These villages are located on the northwestern coast,

between Morphou and Khrysokhou Bay, cut off from the rest of the island by the steep and rugged slopes of the Paphos forests, and an impression of them as being wild and poor mountain men has developed over the years (SA1/2464/1894). Most travelers do not journey as far as Tillyria, but it is clear in an account by Schröder in 1873 that this stereotype already is firmly in place (Pohlsander 2006: 174-177).

The Commissioner's report offers a snapshot picture of this area, as he instructed his surveyors to question the inhabitants in each village about goats, field watchmen, and delimited land, among other things. Several of the villages expressed issues concerning the Field Watchmen, as well as with receiving permits for the number of goats they had been accustomed to allow to graze in the forests, and with FDC including multiple pieces of their land within the delimited forests.

To note several examples, the villagers of Pomos informed the officials that "we don't wish to prevent animals of our village going into one another's lands and we have told the FW [Field Watchman] to permit flocks to go into the fields where there are no crops." These villagers also complained that over 200 donums of their land (representing 20 separate claims) had been included within the delimited forest and that they were still paying verghi on the land (SA1/2464/1894).

The villagers of Ayia Marina echoed the comments of Pomos about where the flocks could travel - "when the crops are reaped no harm can be done and the flocks should be permitted to roam over the fields". They also noted that they all had claims for land within the delimited forest. This same story is repeated by the village of Kokkino, which states, "we don't wish the sheep and goats prevented from grazing onto the lands of others; all pleased to allow one another to do so and we have made a written agreement about this which the FW respects" (SA1/2464/1894).

Alternatively, several of the other villages note that there are members within the village who do not want flocks on their fields, and therefore they are in support of hiring

a Field Watchman. These statements of support are often accompanied by requests to graze flocks in the forests to make up for the lands upon which they are no longer allowed. As one example, the village of Loutros notes that "Hitherto we grazed in the hills outside the forest, but persons, since the FW law was in force, who own lands among the hills won't allow this." As a slightly different example, Pyrgos residents make the following comments, "we wish to graze in the forest. We used to graze in the village fields but people object now because they have planted trees in their lands." This comment must have pleased the Forest Department, as it had been encouraging tree planting on private land.

Several of the Tillyria inhabitants note that they have had to decrease their flocks, either through selling them or on account of death by starvation, because they have not been granted forest grazing permits. For example, the residents of Ayios Theodoros note that "Flocks have decreased since the delimitation; we sold them as we have no place to graze them in". If the shepherds are the rule-breaking lot they are so often depicted as being, one would think that they would have found some way to illegally maintain their flocks rather than allow their numbers to decrease in order to be legal (SA1/2464/1894).

As a final example, the account from the village of Livadhi (the same village discussed in Chapter 5) suggests that the colonial officials' complaints of goats running at will through the forests with no shepherd controlling them may be accurate in some instances. The Livadhiotes provide the following detailed account which also suggests inefficiencies in the colonial approach to the animal census.

> When [the goats] were first counted by the Major Xerophon Liepides and his men this year we collected them in our mandres ready for counting and they were counted; at this counting the major asked each shepherd if he had any loose in the forest and we told them if we had any; he makes us tell him on our oath and we tell him as near as we can for we are not certain of the exact number we have. Almost 20 days after the first counting, the major came again with his men and he and his men brought in our animals from the forests; this took eight days and as the goats were brought in we were obliged to keep them in our houses till they

> were collected and counted. Owing to the want of food the goats died and the kids in the mandres, about 25 of each, died. The major put down more but he really didn't find more; he put down more because he wished to show the expense of the second counting had not been incurred for nothing. He followed this plan: finding no more than the first counting here he went to Yallia and collected the animals there but some of our goats having been let free went over to the Yallia side and were included in the Yallia counting as well so they were doubly assessed. We have about 3000 goats. They are decreasing, we sell them as the tax is so high (SA1/2464/1894).

The colonial authority recording the story noted that "there seemed to be a strong impress of truth" in the account above. The Livadhiotes also complain about the Field Watchman and the delimitation at the same time. They are charged for a Field Watchman, whom they share with Pomos, Yallia, and Ayia Marina, but they have no fields because the delimitation closely surrounded their village and left them with no vines or cereal fields and therefore they see no use in paying for a FW (SA1/2464/1894).

Since the primary purpose of the study had been to determine if the villages were in debt, which they were not, little seems to have been done to address the other complaints of the villages such as detailed above. Several of the villages had noted that they only saw government officials at most once a year, so perhaps this outcome was fairly predictable. However, the region does receive attention again four years later, in October of 1898, following a visit by E. Casolani to the Tillyria district while on police business to round up suspected criminals and collect firearms. He reported the following about the area, "The produce of those lands cannot be otherwise than scanty and the communities dependent thereon appear to be doomed to lifelong poverty, however industrious they may be. This state of things, combined with the wild nature of the country, is, I believe, accountable to a considerable degree for the prevalence of crime, particularly sheep-stealing" (SA1/3658/1898). Further, on account of the utter poverty of the area, he notes that "it is no exaggeration to say that at present very few of the male population of Tylliria . . . refrain from committing a crime when opportunity offers". Given this

situation, he recommends that the villages be moved onto land the government owns on the plains so that they could adopt an agricultural lifestyle and with the prosperity of the new sites, they could "give up their thievish and otherwise criminal habits" (SA1/3658/1898)[7].

The HC asks for the Commissioner of Paphos opinion about Casolani's report, and his response paints a completely different picture of the region. He notes that he is not surprised that Casolani thought that crime was high in the area, as this is an impression "shared by most people who have not become acquainted with the actual facts". Further, he suggests that Casolani arrived in "Tylliria with a fixed Idea in his head, and that it did not occur to him that perhaps this idea was not a correct one". His comments about sheep stealing and crime are "quite mistaken" as "crime is not more prevalent in Tylliria than elsewhere in Cyprus" (SA1/3658/1898).

As for the poverty of the area, the region is poor, but it is a productive region agriculturally. Large amounts of the district's barley, in fact, the best barley, come from this hilly area. Further, the region grows almost all of the district's carobs, as well as a sizable quantity of olives and figs (SA1/3658/1898). So much for descriptions of these people as being solely wild animal herders!

In the Commissioner's mind, it makes no sense to remove people from this productive agricultural landscape. Nor does he think that the inhabitants want to move, although he does note that they all have a similar complaint – "All over Tylliria there is the same cry. 'Let us send our goats into the forest so that our trees and crops may not be destroyed.'" The Commissioner views this limit on their goats as necessary, however, as "If these goat herds were allowed to have their own way, it would become a treeless wilderness" (SA1/3658/1898).

[7] Recall from Chapter 5 that a suggestion had already been made by this time to move Livadhi to Orites, a suggestion that the HC refused to consider.

The Commissioner, despite his otherwise liberal view of the area, obviously follows the foresters in their views of the goats. His comments are telling nonetheless, in that they provide further proof that the inhabitants were grazing goats in the forest in the past while also practicing agriculture. Although neither the Commissioner nor the forest officials seem to consider this point, the fact that trees are present in the area (so much so that the Commissioner states that the region does not need any reforesting) and that goats have been present in the area for some time as well, suggest of course that the two can successfully coexist.

Within this setting, the actions of the delimitation committee in claiming the land of several of the Tillyrian villages as discussed in Chapter 5 and noted in the village's complaints above become much more worrisome. The Forest Delimitation Commission (FDC) has wrongly assumed that shepherds could not be farmers, and vice versa. The fact was that owning goats did not preclude one from farming, and that further, full-time shepherds could be employed by those who owned fields and farmed themselves – in short, there was not a dichotomy between the farmer and the shepherd. The Forest Delimitation Commission and the Forest Department simply refused to see this aspect, and their anti-goat actions continued, driven not only by forest concerns but also their negative assumptions concerning the character of the goatherd. One could imagine that Thirgood's statement that "…shepherds sought grazing wherever they could find it. When the crops were still on the ground they stole what they could from them" (1987: 121) would have been approved by the British officials.

This misunderstanding of traditional land management on Cyprus continued under Bovill, although funding and a worried administration prevented the Forest Department from fully achieving its goals regarding goats. As with Biddulph, Thirgood suggests that the Administration "clearly was not prepared to accept the final implications of its policy,

or perhaps it did not fully appreciate the significance of the grazing problem" (1987: 122).

Thirgood's statement once again oversimplifies the issue. As an illustration of the complexity of colonial rule, while many members of the administration were anti-goat, several of them were not. King-Harman, who became HC in 1905 after serving on the island for several years prior in various roles, is one of the primary supporters of the local people, people whom he realized depending upon the goat to survive. Gennadius, the Greek Director of Agriculture in the latter 1890s and early 1900s, also seemed to grasp this fact, as he portrayed the goat as the Cypriot milch cow, a fitting indication of the importance of the goat to the rural economy (Christodoulou 1959).

Despite the HC's sympathy with the local people's cause, the administration did continue to push through legislation aimed at reducing the amount of free range grazing and debates concerning the best course of action are frequently seen in the archives. In 1911, two newspaper articles show that there was disagreement as to what should be done about goats even among Cypriots themselves. The first article, from Alethia (11/9/1911), stated that goats, forests, and plantations could not mix, as it had been proven that the goat was damaging to them by "eating greedily the tender branches of trees", and that a large tax was needed to convince people to switch to "the innocent and tame sheep". The second article, published a little over a month later (10/26/1911) in Empros stated that the goat should be banished only from areas in which they caused damage and not from the parts in which they were harmless. The large and well-grown forests could not be harmed by the goats and so those could be granted for grazing, but the necessary precautions and securities should be taken against incendiariness. In other words, this article suggested limitation, as opposed to the extermination suggested in the first article. Further, both of these articles suggest a decidedly elite view to the topic, as

they both accept the government's argument regarding goats and trees to at least some extent (SA1/1519/1911).

The situation became more complicated in 1913 when the Goats Law was passed. The law set in place a framework whereby a village, recognizing the wisdom of the continual negative propaganda concerning the goat by the British, could vote to exclude goats from its boundaries. Individual households were not even allowed to keep a single goat for milk and cheese. As an incentive to this law, villages that passed it were often offered extra pieces of land that they were to cultivate. Ironically, the land they were offered frequently was land that they claimed had been unfairly included within the delimitation[8]. This plan had frequent problems, ranging from villages complaining that they never received land, to land being given out over which court battles were still occurring, to villages complaining that the land they had been issued was no longer fertile a decade later (SA1/1164/1914).

Setting aside the issues with the incentives, the law was initially touted as a success, as 140 out of 640 villages balloted against the keeping of goats during 1913-1920 (Thirgood 1987:124). The Officer administering the Government at that time for the HC, was upset that the bill had initially been passed in a much more "emasculated" version than he desired, although it did recognize "the presence of goats in the Island as an evil and provides for its abatement" (SA1/1519/1911), so he must have found pleasure in that.

Furthermore, the law was not as popular as some might have desired among other government officials or the Cypriots. The Registrar General suggested in 1916 that giving land as an inducement was a poor idea, as the land would go directly into the debtor's hands (SA1/1164/1914). Waterer, in retrospect, thought it was never fully successful because the shepherds scared the village into not voting (SA1/857/1945/1), while the

[8] In other words, the British were encouraging and teaching them to become successful farmers by giving the villagers back the land that they had stated belonged to them since before 1878!

Forest Enquiry Committee of 1928 suggested that the people just moved their goats elsewhere, as opposed to fully getting rid of them (SA1/1164/1914, SA1/847/1928).

THE ISSUES SURROUNDING GOATS IN THE 1920S AND 1930S

A glance at some of the *Cyprus Reports*, an annual series produced by the government and the London office, published before 1923 might lead one to question how large of a concern goats were for the colonial government. The *Cyprus Report* for 1922 contained a variety of commonly presented themes during this time period, such as that the forests were lush in antiquity but not presently and that their importance lay in water conservation and increasing rainfall. However, there was no mention of goats or shepherds within the report.

The 1923 *Cyprus Report* presented a different picture.

> Active measures have been taken during the year to reduce and control the number of goats grazing in the forests, by which destructive animals great damage is done to seedlings and young trees. The lawlessness of the shepherds adds considerably to the difficulties of the forest administration, but it is hoped to overcome their instinctive opposition by the tactful exercise of a spirit of reasoned compromise (27-28).

The 1924 *Cyprus Report* presented an even more detailed account of this concern with goats and shepherds.

> The great enemy of the Cyprus forests is the goat. These destructive animals with their poisonous teeth and voracious appetite do incalculable damage to seedlings and young trees in addition to the indirect mischief caused by the trampling of their feet and the loosening of the earth and stones on the steep mountain sides which affects to a very heavy degree the annual increment of growth. The difficulties encountered in this connection by the Forest Department are augmented considerably by the ignorance and lawlessness of the shepherds and by the general failure to realise and admit the evil effects of promiscuous goat grazing (37-38).

Within the course of a year, the goat and shepherd became quite famous within these reports. The reason for their fame can likely be found in the influence of Unwin, who as noted in Chapter 4 was hired in 1921.

The Ongoing Result of Legislation

Within the context of Unwin's first several years as PFO, in 1923 a member of the Legislative Council (Eliades) recommends that the Goats Law be altered so as to allow two or three goats per family. At the time he requested this change, some of those villagers who previously had balloted against goats were already asking for them back. Whether they had received land and it had gone to the debitors, as the Registrar General suggested, or whether they were still waiting for some promised incentive, they obviously had realized that they could not survive without their goats (SA1/652/1923).

Lest one forget about the Field Watchman's Law, Unwin's anti-goat stance had led to a recent amendment making it easier to exclude goats from waste land so that the waste land could then be developed as either forest land (Unwin's goal) or agricultural land. At least two files from the early 1920s noted concerns about the effect it was having. One comes from the Tillyria region where, as noted above, the villagers initially displayed a community regulated policy of allowing goats to graze on the fields following the harvest. The story has now changed. The Commissioner is concerned about the shepherds in the area as "landowners are shewing an unexpected vindictiveness in refusing shepherds permission to graze animals on their lands, even when the lands are lying fallow, or after the crops have been gathered." As the Commissioner further states, while he does want to see the landless shepherding lifestyle phased out, this needs to be done gradually, and the poorer hill villages cannot survive currently without their goats. He

therefore wants permission to increase the number of forest grazing permits issued within the State Forests (SA1/1164/1914).

A further comment by the Commissioner might partially explain the altered behavior of the land owners. The shepherds are being reduced to such poverty by the lack of grazing areas that they are selling their goats out of desperation at below market rates to the landowners. Although the Commissioner views this as a positive step, since it means a further reduction in the number of shepherds, one could also question whether the landowners are not refusing entrance to their lands for just that purpose – reduce the shepherd to a state of poverty and then purchase his/her animals, and employ the shepherd as hired labor (SA1/1164/1914).

A second file concerns a request by Eliades, the same Legislative Council member mentioned above, to ask for leniency in granting grazing permits to several villages within the Limassol District. As he notes, although he was initially behind the Field Watchman's Law in order to provide protection to the farmers, it has now placed too much power in the hands of the agriculturalists. "By these measures … a mortal blow is inflicted on stock breeding which is one of the wealth-bearing resources of the Island because most of the farmers bearing a grudge against the shepherds for many reasons refuse to grant them a written permit as provided by the Law to graze in waste lands." Since many shepherds have already had to sell their sheep and goats or slaughter them, he is concerned that stockbreeding will be destroyed, an action which would be of detriment not only to the shepherds, but to the Islanders and the island's revenue. One solution to this problem in Eliades' eyes is to allow certain villages to graze in "those forests which euphemistically only can be called forests because bushes alone are growing in them" such as Akrotiri, Episkopi, or Randi[9] (SA1/1114/1923/1).

[9] All of these are considered minor forests today.

Unfortunately for Eliades, Unwin does not agree with his reasoning. Unwin justifies his refusal of Eliades' request with the following comments, which help to situate his views on the goat issue. Unwin argues that villages which have renounced grazing are now thriving on pure agriculture and horticulture, and therefore if Eliades' villages which just try, they could do the same[10]. Further, Unwin reminds Eliades that forests start from shrubs, so the island would have no mature forests if grazing were to be allowed in all the shrub areas that Eliades suggests. Finally, Unwin states that the present generation simply is not thinking far enough into the future. The previous generation did, which is why there are forests in Unwin's time, but if the current generation continues thinking as they do, they will destroy all forests. "They should be enlightened in this respect" (SA1/1114/1923/1). Thus, Unwin's reasons for disallowing goats rest on a shaky understanding of the success of villages without them, a classic succession argument which also draws back up the crisis narrative of nearly a half century prior, and an attempt to shame the Cypriots into disallowing grazing, again within a crisis narrative. What is lacking from Unwin's reasons is any specific proof that goats are causing harm to the Cypriot landscape. It is also clear that by the first several years of Unwin's rule, his notoriously anti-goat sentiments have already started to make life more difficult for the Cypriot rural animal owning population.

[10] The desire of some of the villages who have passed the Goats Law to reclaim their goats suggests that this argument is at least partially flawed. As a later example of villagers still wishing to reclaim their goats, the movie *Cyprus is an Island* from the 1940s contained within it a scene in which a village was supposed to be voting to ballot against goats following the rules of the Goats Law. To make the scene more realistic, Keene and Lee arranged for the scene to be shot in an actual village (which had already passed the Goats Law in real life) and arranged for the district officer to be in the village. The villagers in the location where the scene was shot utilize the fact that the district officer is in their village to request that they be allowed to reverse their decision to pass the Goats Law, as they have realized that they cannot sustain their livelihoods without their goats!

Livadhi Once Again in the Spotlight

In the midst of Unwin's first several unpopular years, shepherds driven by their dislike of Unwin and a desire for revenge are said to have been responsible for large forest fires in the Paphos forest that occur in 1924 (see Figs. 7.1 and 7.2 for number and area of fires). Shepherds from Kykko and Livadhi are originally implicated as the ones to blame for these fires. This choice of blame is hardly surprising; Unwin had been attempting to limit the power of Kykko Monastery from practically his first days in power (SA1/979/1892) and Livadhi had by then become a favorite village for foresters to point to as being composed of all landless, fire starting shepherds.

Kykko did have a large number of goats, and Livadhi was composed of primarily landless shepherds, but the accounts of the day also leave out a key aspect of Livadhi's history. Namely, as discussed in Chapter 4, the village had cultivatable land within the forest which it had tried to claim during the delimitation, but its claims had been refused because of the lack of a title deed. It tried to claim the lands again on the basis of the fact that it was still paying verghi on those lands in the 1880s, but the government refunded its verghi and denied its request. As stated previously, the reasons were that the British viewed it as either a village of shepherds or woodcutters and assumed that they would therefore have no use for cultivatable land. Further, the government wanted to encourage it to move, although it did decide to allow them to rent land at a reduced rate from within the delimited State Forest in 1893 which they could cultivate (SA1/278/1924, SA1/1111/1925).

Livadhi's situation had not improved in the intervening three decades, and the arrival of Unwin had made its situation even worse. Unwin had dramatically cut the number of grazing permits provided to the village. He viewed it as a favor to provide the villagers with any permits at all, even a reduced number, as many of the villagers had been arrested for forest offenses which normally would result in a loss of forest privileges and

a fine or jail time. However, since punishment by taking away permits or by placing someone in jail only works if a) the person has permits to take away, or b) jail is a particularly nasty place which it was not in Cyprus, Unwin's claims of leniency had had little effect on the village. All was not lost though, as at the time of the fire, the Commissioner, against Unwin's better wishes, was in negotiations with the village for a compromise which would provide them with a larger grazing area so that they could have some means of survival. With the outbreak of the fire, however, the chances of the village receiving additional permits were ruined both because the areas in which they were to be allowed to graze had been burnt and the Forest Department wanted to reserve the area to give it time to recover as well as because they were viewed by many as the guilty party of the fires.

Unwin uses this opportunity to push forward his own plans to resettle Livadhi outside of the Tillyria region, but the Livadhiotes refuse. The new site Unwin had selected for them was within the Akamas, at a site called Smyghes. The natural vegetation consisted of scrub with some carobs, the soil was exceedingly rocky, and fresh water sources were limited (SA1/403/1925). Since part of the resettlement plans were that they would turn to farming to support themselves, and this location was not particularly well-suited to agriculture, the Livadhiotes likely made a wise choice in refusing the offer.

Forest Enquiry Committee and the Latter 1920s

The general unhappiness of even the Cypriot elite concerning forestry issues as well as most other aspects of British rule during this period is reflected in the actions of the Legislative Council, who refuse to accept the budget presented them in 1926 and complain about forestry to such an extent that a Forest Enquiry Committee was created to examine the situation on the ground (SA1/847/1928). Newspaper accounts from the

period urge the committee to do a better job looking into the reasons behind the present forest situation than the official enquiry into the fires had done in 1924, as it had determined that the fires reflected the action of unhappy shepherds wishing to get revenge with the government. For example, an excerpt from the newspaper Nea Laike expresses its desire that this latest Forest Enquiry Committee actually go out in person to see the desperate conditions in which the people are living. The previous enquiry in 1924 had not done this, and consequently this columnist stated did not gain a full understanding of the situation (SA1/1549/1926). As another example, an extract from the newspaper Eleftheria (No. 1283, Dec 4, 1926) expresses the opinion that the committee needs to talk with non-foresters outside of the influence of the Forest Department. If they only speak with forest officials, as the previous committee into the 1924 fires had done, they will reach the same conclusion that the forest fires were due to political reasons. However, according to this writer, the forest fires were not due to political reasons, but to other reasons which the new Committee must discover themselves.

How successful this new Forest Enquiry Committee is at rooting out the causes of the forest fires and offenses is uncertain, although it is certain that they traveled throughout much of the island in the process of writing their report. Their final report recognizes the importance of the goat to a “primitive” and “extremely conservative” portion of the island who depend upon the profit they can garner from its milk, cheese, meat and skins. They also recognize the need to proceed in phasing out this primitive portion of society with patience, as trying to do it too quickly would likely result in failure. These statements reflect the typical government opinion of almost everyone except Unwin at that time. By depicting the goat as being only important to one class of society, they are certainly selling its importance short, as milk and cheese at that time for all residents on the island would have come primarily from goat or sheep (SA1/847/1928, SA1/1220/1928).

Further, despite the appearance of agreement given in the Committee's final report, the archives indicate that they actually held a two day discussion on grazing within the context of further forest fires in 1927, and in the end they could not agree upon what should be done about it. The elite Cypriot members were concerned that stricter grazing rules would increase the already existing ill-feelings toward the Forest Department, thereby consolidating further public opinion behind the cause of the shepherd and also increasing the risk of malicious injury or arson. The British members do not seem to share this concern to as great of an extent. In the end, they submit just the one report despite their disagreements, as all of the Cypriot members state that they are unable to find the time to write a minority report as it had been suggested that they do (SA1/847/1928).

In the meantime, Unwin was still continuing to extol the virtues of teaching the Cypriots to be farmers, even though his attempts with Livadhi had been unsuccessful. One of his typical statements from 1928 discusses the need to continue with the "insistent propaganda and effort … to teach the people the need for taking the greatest care to prevent fires" (SA1/1220/1928). As it appears that many inhabitants had been living within the forests for multiple generations, the need of these inhabitants for education is open to doubt.

Moving ahead to 1930, the Goats Law is finally reformed so as to allow for three tethered goats per family. The number of forest offenses and fires continue to rise during this period, and the shepherds continue to serve in the role of scapegoat, especially in terms of the fires which Unwin persists as seeing as primarily revenge driven. In 1935 a further revision to the Goats Law is enacted, which makes it easier for a village to pass it without the full approval of all its members. This revision stated that only a 50 percent majority was necessary to pass the bill, and that furthermore, an absent person would be considered to have voted yes on the bill. The foresters argue that the second clause is

necessary because the shepherds terrorize the farmers to such an extent that they are too scared to vote on the allotted day. One could easily point out that the farmers, who in the accounts above seem to have the upper hand, at least financially, could just as easily use it to their advantage.

NEW LEGISLATION – THE SHEPHERD'S LICENSING LAW

Discussions had also been slowly developing over the years concerning the possibility of a Shepherd's Licensing Law[11]. The idea had been introduced back in 1882 by Kimberley, but it is not until 1926 that any attention is devoted to it. A member of the Legislative Council (Michaelides[12]) requests permission to introduce a draft of the bill that year, although the request falls on less than receptive British colonial ears. Michaelides' request is repeatedly stalled; the government officials refuse to provide the means to translate the bill or to provide copies for circulation. Michaelides repeatedly asks the government about the bill over the course of the next several years, but the Government shows has no interest in the topic. It appears that they preferred to see if their own laws concerning police and field watchmen were enough to deal with any crimes committed by shepherds. Concern was also voiced that the bill would allow the flock owner to shirk his or her responsibilities by allowing the shepherd to be held

[11] As an indication of the amount of history that must be read between the lines when dealing with Thirgood, his only comment about this bill is that "there evolved a policy of licensing all regular shepherds as a first step to control, and controlling and defining grazing grounds" (1987: 170).

[12] Michaelides is fiercely anti-shepherd. In a letter to the Governor in 1929, he notes that "Shepherds in this Island have been, ab antiquo, a curse to the people. They are persons most determined to deprive their co-villagers of all and every progress. It is time by now that this indescribably destructive animal, no less than their owners and the shepherds should be mercilessly crushed down in order that the farmer in this country should regain courage for the improvement of his lands and apply himself all-heartedly to the plantation of fruit-bearing or otherwise useful trees…. In writing the above I am not, of course, unaware of the severe provisions of the existing law in the country, yet I wish to emphasize the fact that shepherds are the most dishonest class of people in this country who purposely and most maliciously endeavour to enforce a system of destruction and damage to the property of those people who alone take or accept compensation from them" (SA1/1680/1926/1). One has to wonder if he owned a plantation of fruit trees or extensive agricultural fields himself, or if he simply wanted to be free of any responsibility in terms of the behavior of his own shepherds, if he had any.

accountable for crimes committed by the owner's flocks. The only way to solve the goat problem on Cyprus, these officials in the 1920s argued, was to ensure that only those with land on which to graze them were allowed to buy them. However, they can not develop a means to ensure such a measure, and over the course of the next several years opinions change, so that by 1934 the Government is now favorably examining the idea[13] (SA1/1680/1926/1).

During the discussions of how to enact the bill, it becomes painfully obvious how little the British officers understand the practice of goatherding on Cyprus. It also becomes apparent how fully accepted the stereotype of the shepherd as being lawless, mischievous, and a general drain on society is for many of the officials. As one commissioner quips following a suggestion that the law should state that only shepherds with good character be licensed, such a plan would result in a complete lack of shepherds on Cyprus, as they are all of bad character (SA1/1680/1926/1).

The comments of the detractors are among the most interesting; it appears that they are the ones who have first hand experience with the system of shepherding on Cyprus. The Director of the Agriculture Department numbers himself among them, which is a rather strong statement when one considers that the bill is designed with a goal of keeping goats off of private agricultural lands, something which one might think the Agricultural Department would support. However, the director of the Agricultural Department as well as the other detractors all share a similar concern about the bill; that it will accomplish nothing. It is not the shepherd who should be punished in most cases, but rather the owner, they argue. Their argument is supported by the fact that it is estimated at this time that only 50 percent of the shepherds owned their own flocks. The Director of the Agriculture Department further explicates the situation: "The flock must feed at the

[13] Unfortunately for Michaelides, he has died by this time so he does not get to see his plan come to fruition.

expense of someone other than the owner, who regards as a ‘good’ shepherd one who does not make it necessary for him to hire pasture.” It is for this reason, he states, that all existing legislation fails to control the grazing problem, as the owner is never held accountable. The shepherd, if convicted, usually spends several days in prison, which is not considered a hardship for him. If the government could develop legislation which held the owner of the flocks responsible, only then does the Director of the Agriculture Department state that he would be supportive (SA1/1680/1926/1).

Another detractor, a stockowner, also illustrates the complexity of the issue, as well as the skills of the Cypriots at skirting the laws. He argues that the Director’s suggestion will not be fully successful either. According to this stock owner, this is because it is common to see in Cyprus a situation whereby the shepherd owns the flock on paper, but only because he paid for them using money loaned to him by the rich agriculturalist. The rich man knows that the shepherd will never be able to pay the loan back to him, so for all practical purposes, the rich man owns the flocks. If the shepherd is caught breaking the law, the worst that can happen to him is that he is put into jail, while the rich man can not be punished, as he is not legally the owner. Nor can the shepherd be forced to sell the flock, as they are pledged to the rich man on account of the money loan (SA1/1680/1926/1). It is possible that some variation of this had been occurring in the Tillyria region in the preceding decades.

Regardless of these accounts highlighting concerns with the bill, it is passed in 1935 with the following stated objects

> to check the depradations caused to rural property by shepherds…. It is considered that the best mode of dealing with this grave problem is to make provision for the licensing of shepherds. It is anticipated that this will result in owners of flocks being more careful in choosing their shepherds, while the shepherds themselves when they realize that the exercise of their calling is subject to a license will, it is hoped, acquire a sense of greater responsibility and will perforce have more respect for the property of others (SA1/1680/1926/1).

It appears that the majority of the colonial officials simply cannot understand that the shepherd is not at complete liberty to do whatever he or she wants in many of these cases. A response to the Director's minority view re-emphasizes that this new law will work because it will make the owner be more responsible in hiring his shepherds. After all, the author blithely notes, "the problem is how best to prevent …shepherds…from ruining tree planting and other cultivation", not how to prevent the owner from doing so (SA1/1680/1926/1).

Based on the limited amount of knowledge concerning goat and sheep grazing held by the officials, it comes as no surprise that the bill has to be immediately revised after being passed. The items in need of most immediate revision reflect basic issues. For example, the number of goats allowed per shepherd must be increased, as the number included within the original bill does not allow a shepherd to manage enough goats to make a living. More generally, several point out that the number that one shepherd can control can not be numerically set, as it depends upon the landscape, the time of the year (pre or post harvest), and the skills of the shepherd. The age of shepherds needs to be revised, as younger village children do take the household animals out to the main village shepherd in the evening and collect them at night. The fact that female shepherds do indeed exist needs to be emphasized for those who did not consider that females could be licensed. The periods when young are weaned, and the question of whether there should be a minimum number set as to the number of young which can be kept by one shepherd are discussed for the first time, as though the initial bill writers had not stopped to consider the issue (SA1/1680/1926/2).

Despite these concerns, the number of shepherds who request licenses surprise all, although it would be assumed that they requested the license not out of support for the plan but out of fear of being convicted if found without one. There are multiple requests for the creation of additional shepherd's badges, an arm placard that must be worn by the

shepherd at all times (see Fig. 6.3 – 6.5 for examples of an earlier grazing permit, the badge, and the license). Only those people either too young or with prior criminal convictions, depending upon the severity of the crime, were denied licenses. The government goal of licensing the shepherd was therefore successful in their minds, whether or not it stopped any "depredations" of the shepherd.

THE EVER DECREASING GRAZING LAND

The perceived need for a Shepherd's Licensing Law to prevent trespass on private properties points to an increasing issue arising from the various Forest Laws themselves. The Forest Enquiry Committee in 1928 had hinted at these concerns and so had the files outlining events in 1924 – namely, the push and pull effects that a) forcing the goats out of the forest, and b) placing agricultural concerns first, including incentives to develop hali land (waste land, traditionally grazing ground) had created. The goat and shepherd were forced onto land which they otherwise may not have considered allowing their animals, or their employer's animals, to enter. Tensions were therefore increasing, and it appeared as though the end result would be to convince the general Cypriot population that the shepherd was the disliked entity the British had initially presented them as being. Files from the latter 1930s also recognize this issue, as they express the Agriculture Department's concerns that the push for agricultural development had led to intensive amounts of illegal cultivation of hali lands, which the cultivator would claim as private property after ten years of cultivation. This illegal cultivation was occurring at such an unchecked rate that there was concern that not enough land will be left for the shepherd (SA1/714/1928).

The Agriculture Department's concerns about the lack of grazing grounds are well founded, as the self-fulfilling prophecy created by the Forest Department policies

continues unabated and is only intensified during the goat buyout schemes of the late 1930s and early 1940s. In this scheme, the government paid each goat owner a certain amount of money (more if the owner had a free permit to graze within the forest, less if the owner had a paid permit), although sometimes provided land or trees instead, to sell off his or her goats. They were then to use that money to establish themselves as legitimate, hard-working, agricultural members of society. Kykko sold its goats in 1938 for the high price of £7000 and others soon followed, so that the department's *Annual Report* from 1948 can note that goat grazing had been completely eliminated in the Southern forests by that time.

The Forest Department officials present this goat buyout as a representation that the government education and propaganda campaigns aimed at teaching the Cypriot how to love the forests and that grazing was destructive had actually worked. The reality is not so clear. Two informants described the events to me be as being inevitable, that there was no choice but to sell. Complaints within the archives that the people who had been compensated for their goats had begun goatherding again indicate that either public opinion was not swayed and the goatherd simply agreed to the scheme for the money or out of necessity, or that no other means of livelihood could be found by the goatherd[14].

COLONIAL DEVELOPMENT AND WELFARE GRANTS AND VILLAGE REMOVAL

The Colonial Development and Welfare program began in 1942 and the Forest Department received several grants through it. This program would especially have an impact on the lives of those living within the few remaining forest villages within the Tillyria area. As noted previously, proposals had been made early in the British

[14] Another informant spoke of the reliance of the shepherds on mine work, and in earlier years on woodcutting efforts within the forest. Neither of these jobs was necessarily ideal, however. An older brother of one informant had been killed in a wood cutting accident, and mine work could require extended periods away from home. Gordon (1955) also mentions the importance of mine work for the shepherds.

occupation to move these villages, and those suggestions had persisted through the years. To place these ideas in context, the strong anti-grazing climate combined with the lack of cultivatable land (i.e. an alternative to grazing) had made their lives increasingly difficult. During World War II, some had found jobs within the Forest Department, and yet others had turned to their own entrepreneurial skills when it came to woodcutting. However, that work had mainly dried up by the mid 1940s, and they were left with very few acceptable options for a livelihood. Three villages, Livadhi, Ayios Merkourios, and Paliambela or Dhimmata therefore requested to be moved outside of Tillyria, following persuasion by the forest officials backed up by the Colonial Development and Welfare funding.

As noted in the prologue, Nea Dhimmata was constructed from scratch in order to be a social experiment in progressive, communally-minded agricultural living. Nea Dhimmata was the only example of a newly constructed village, as the other villages were provided with funds with which to construct or buy homes. Livadhi was provided with agricultural land purchased from some of Kykko's land holdings near Morphou, while Ayios Merkourios received land on the footslopes of the eastern Troodos.

Written accounts of the success of moving these villages are nearly impossible to find, if any have ever even existed. It may be that many members of the Forest Department through the years have followed similar thinking as a retired Director of Forests with whom I spoke. When I inquired as to whether there had been any follow-up studies conducted on Nea Dhimmata, he told me that there had been none, but immediately qualified his statement by asking why there should be any at all – everyone knows that they are happier and better off in their new village than their old one[15]. Without the presence of follow-up studies, it is difficult to know what actually happened in these villages, especially if my informant was correct that both Livadhi and Ayios Merkourios

[15] The validity of that statement will be further explored in the epilogue.

joined themselves with other, pre-existing villages upon their move, and that several of them went to live with relatives in a different area all together. If Nea Dhimmata is any indication, it would be fair to suggest that the moves were not stellar successes.

SUMMARIZING THE ROLE OF GOATS THROUGHOUT THE BRITISH PERIOD

Through the combination of the chronological themes outlined above, by the time the British left Cyprus, they could accurately claim that they had removed all free-range goats and their shepherds from the Southern Forests, and they had made good progress on the more difficult to control Northern forests. They had even moved three villages in order to ensure the safety of the forests. However, their claims that this had occurred because they had "taught" the shepherds how to protect and love the forest is strongly open to questioning. As seen above, necessity seems to have been as big of a factor as any in this process.

Supporting this assertion, within the first year following Cyprus Independence, a special committee had to be formed to investigate the question of forest grazing. With the strict British gone, the rural inhabitants wanted permission to graze in the forests again. Even farmers were in support of this plan, as they argued that they would no longer have to worry about flocks grazing illegally in their fields. The new administration of the Forest Department, several of whom were trained in the UK at British expense, stated clearly that the forests would not be reopened. They justified their "no" response by suggesting that there had been an improvement in land use, especially with arboriculture and animal husbandry, as well as improvement in keeping tethered goats. Regardless of their reasons, that the question was raised at all suggests that the British success at "teaching" was far more limited than they had believed (Goat Grazing Committee 1961).

This chapter has also illustrated another of the indirect results of the forest policies of the British, namely the increased tension between shepherd and farmer that the policies

caused. The British began their rule with the assumption that the two were incompatible, an assumption which has been shown to be false. However, over the course of the decades, as they progressively limited the areas available for grazing, the tensions did naturally increase. Thus, the British managed to imagine, and then successfully create their own version of a system of intensive agriculture conducted completely separately from stockbreeding.

A FINAL CONSIDERATION: THE EFFECT OF GOATS ON THE FOREST?

There is one question remaining. Had the alteration of the Cypriot rural economy which the British had achieved by the time of their departure truly been for the good of the environment? Throughout their rule, the British had always assumed that goats were responsible for what they perceived to be a reduced amount of regeneration in the pine forests. However, in light of traveler's accounts which suggest that the goats had been a fixture in the Cypriot mountains for centuries, what role did goats actually play in the mountain forests?

The British never fully answered that question, and in fact they conducted very few experiments to even test their assumption, despite the observations of both Hutchins (1909) and Troup (1930) that experiments on pinus brutia regeneration would be beneficial. The first experiment on pine regeneration was not conducted until Chapman did so in the mid 1930s, and his study, finished in 1936, was inconclusive. The question was then dropped, and only after the forests did not regenerate as planned following the goat buyout scheme of the 1930s and 40s did serious questions again begin to be raised about the role of goats. Even then, the Forest Department did not have a dedicated research section which could deal with this type of question until 1954, and this section was hampered in its work by the lack of earlier data on the topic. A thesis written in the

UK in 1956-57 by Seraphim, a Cypriot forester, illustrated the issues with previous assumptions by indicating that P. brutia regeneration was not occurring as planned post-expulsion of goats. As he notes, the inadequacy of natural regeneration, noticed by Madon (1930 [1880, 1881]), Reid (1908) and Hutchins (1909),

> was attributed primarily to the effects of goat grazing and drought. Up to the middle of this century most other foresters were of the same opinion. They believed that once the forests were freed from free range grazing they would regenerate themselves much more satisfactorily. When the exclusion of goats from the Southern range forests was achieved between 1939 and 1944 the foresters expected successful regeneration everywhere. However, their expectation has not come true and since then it has become more and more apparent that goat grazing was not the only factor that hindered regeneration. Other ecological factors (climatic, edaphic and biotic) were also responsible (5).

Although Seraphim's views never won wide approval within the department, and indeed, by the end of the document he even qualifies them to return more of the blame to the goat, other studies since then have indicated that regeneration is not fully controlled by the presence or lack thereof of goats. In the valley bottoms and river beds, there were notable changes with the cessation of grazing. On the slopes, however, the story was quite different. Thirgood provides a summary of the issue, noting that there was no uniform behavior to restocking following the cessation of grazing. In some areas, there were striking positive vegetational responses, but in other areas, equally suited to regeneration, there was none (1987:251).

Thus, the main premise to almost all Cypriot forest work, that the goat was highly destructive to the forests, has still not been conclusively shown for the Cypriot environment. This is not to deny that the goat can cause damage in certain situations, as it certainly has the potential to do so, as do most grazing animals, if they are improperly managed. But it does make one examine even more closely the insistent argument of the Cypriots, still held by some today (Michaelidou 2002), that the goats did not harm the forests. Although the island has changed to such an extent in the ensuing years that goat

grazing in the forests would no longer be considered a desirable vocation by many, one still must wonder how differently the colonial period might have proceeded if the British had just tested their assumptions from the beginning.

Figure 6.1. Goat Mosaic from Roman period villa in ancient Paphos (House of Dionysos, 3rd Century AD, photo by author, 2004)

PROVIDERS OF MILK, CHEESE, MEAT, AND LEATHER

These white goats live inside the walls of Famagusta. They cost little to buy and nothing to feed, but their vagabond habits of wandering about unrestricted and foraging on young shoots of trees and seedlings are responsible for much of the destruction of the fine forests for which Cyprus was noted in olden times.

Figure 6.2. Depiction of Goats during British Colonial Period

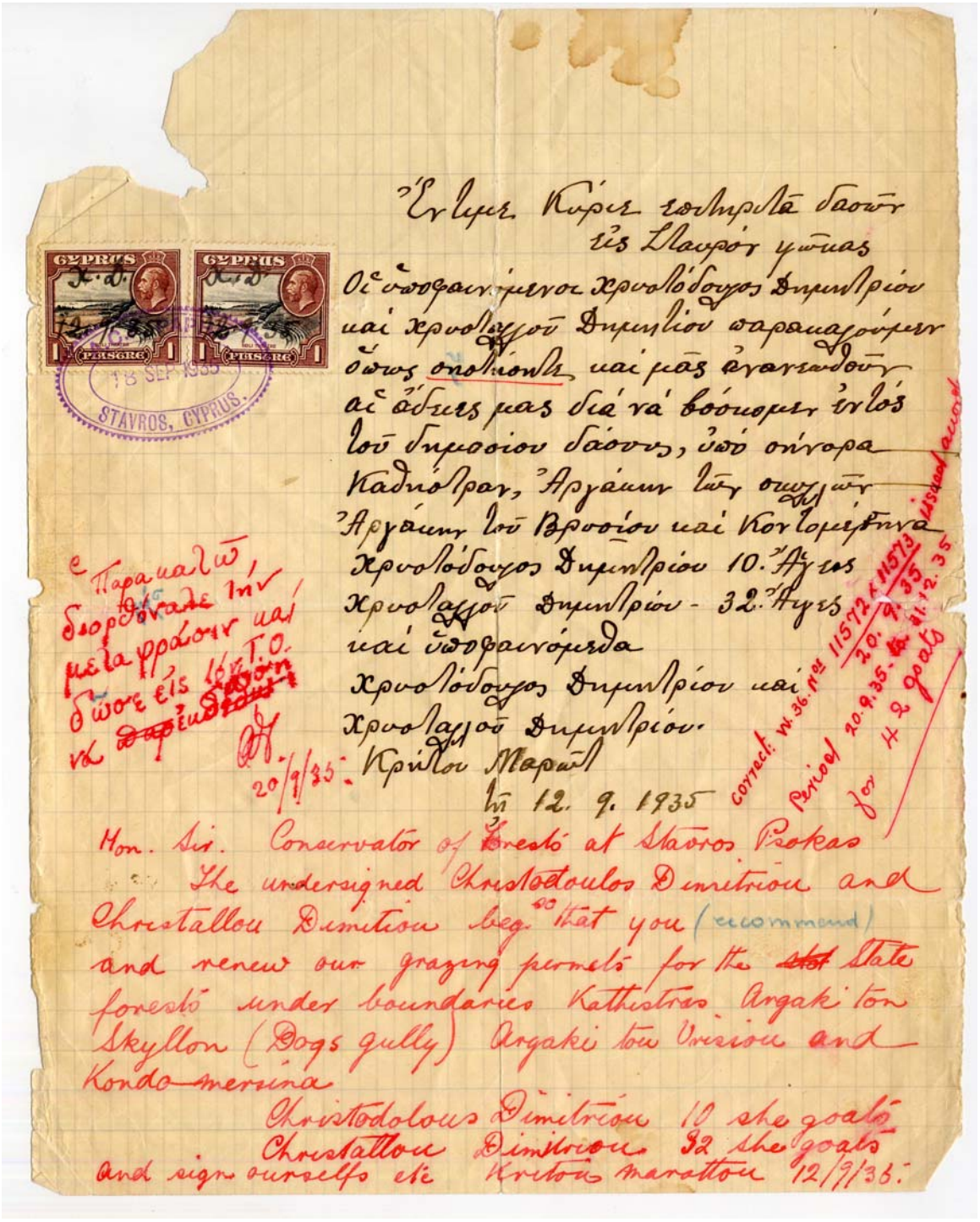
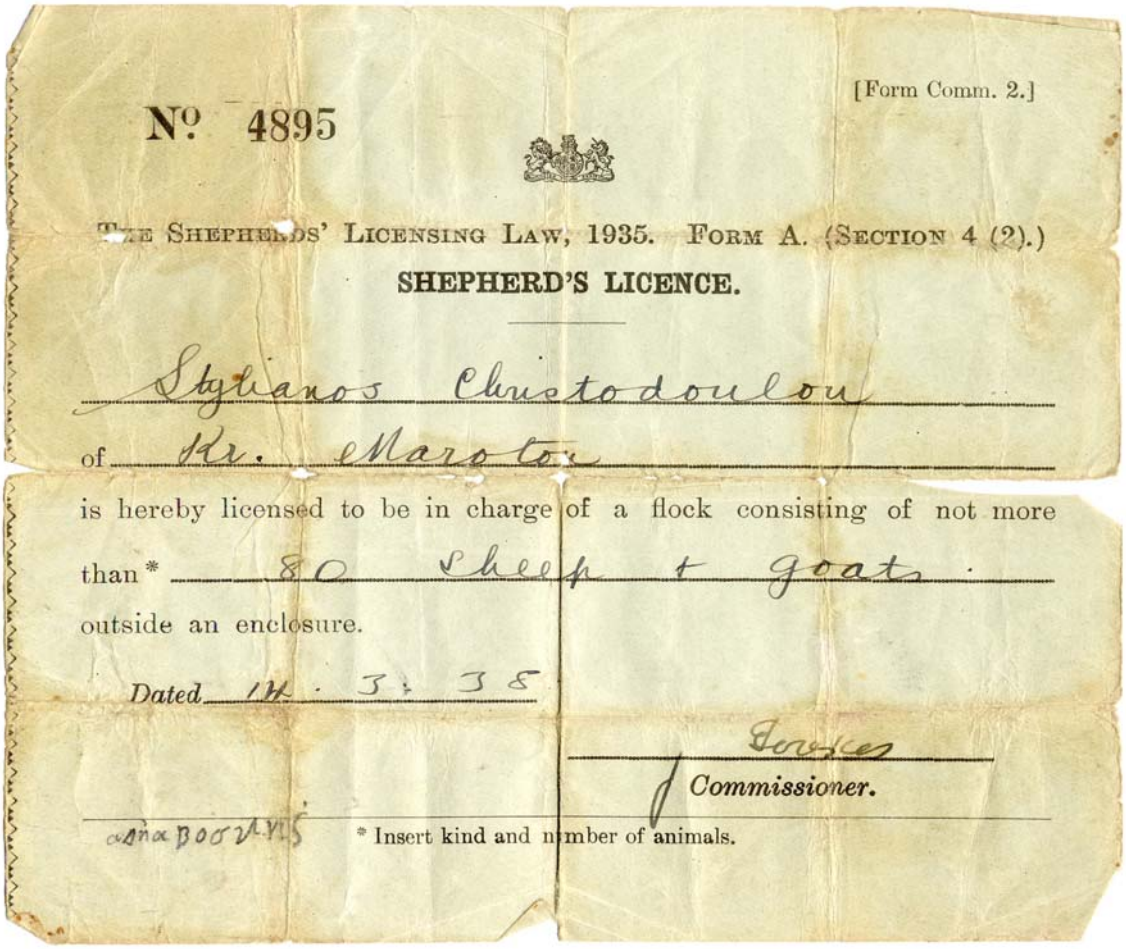


Figure 6.3. Example of a petition for grazing permits from 1935

Figure 6.4. Example of armband worn by shepherds to indicate possession of a Shepherd's License. The "K" refers to Kyrenia District.



[Form Comm. 2.]

No. 4895

THE SHEPHERDS' LICENSING LAW, 1935. FORM A. (SECTION 4 (2).)

SHEPHERD'S LICENCE.

Stylianos Christodoulou

of Kr. Maroto

is hereby licensed to be in charge of a flock consisting of not more than * 80 sheep + goats.

outside an enclosure.

Dated 14. 3. 38

Commissioner.

* Insert kind and number of animals.

Figure 6.5. Example of a Shepherd's License. This form was to be carried with the shepherd at all times.

Chapter 7: Understanding the Number and Role of Forest Offenses[1]

A glance at Figs. 7.1-7.4 illustrates that the number of offenses and fires on Cyprus has varied, at times drastically, over the years. Looking specifically at Figs. 7.1 and 7.3, several basic patterns can be seen. The number of fires and offenses peak during Unwin's reign as PFO, with the offenses hovering at a level between 9000 and 10,000 for several years of that period. The forest offenses and fires again show a peak during the 1940s, while the fires show an additional peak yet again during the EOKA period. The traditional history has explained these patterns and extremely high numbers of offenses by pointing to inhabitants driven by a desire to get even with Unwin for his harsh policies, and again to get even with Waterer (the PFO in the early 1940s) for his efforts in moving the goatherds out of the forest. The patriarchal elements of colonialism, or Pagden's (2006:51) "empire as tutelage" as mentioned earlier, are quite clear in this portion of the history. The natives are like petulant children, resisting the efforts of the British to make them do what is best for them. With enough time, the natives will understand that the British are only looking out for the best interests of the Island's environment and its people, and they will start to behave properly. Indeed, this is the explanation often provided for the decrease in offenses following the mid 1940s.

The purpose of this chapter is to examine the validity of the above history as well as consider other options for understanding the forest offenses and fires in Cyprus. In order to do this, it is necessary to bring together several different aspects of the colonial history, including a more detailed overview of how the British conceptualized the mountain inhabitants, as well as how Cypriot fires compared with the broader Mediterranean culture and how the British came to understand them. It is also necessary to briefly

[1] See Figs. 7.1-7.4 for graphs of fires and offenses.

outline the economic situation of the rural Cypriot during the British period. These elements are discussed below, and then a reinterpretation of the offenses and fires is provided.

THE STEREOTYPICAL WILD AND LAW-BREAKING MOUNTAIN INHABITANT

As noted in Chapter 6, one of the primary purposes of British policies on Cyprus as it related to the forests was to free it from the free-range goats. These free-range goats and their shepherds were said to cause immeasurable damage through burning and grazing, although the actual data are scanty regarding their true effects. More generally, any mountain inhabitant, whose number gradually decreased thank to the British policies, was viewed as a threat to the forests, whether shepherd, woodcutter, or vineyard cultivator. As the Forest Department by the 1920s was trying to encourage the mountain shepherds to get rid of their goats by providing them with forest jobs whatever distinction may have initially existed between the different professions became even less defined[2]. Frequently the different professions were conflated into a general negative caricature of the wild and dangerous mountain resident.

A report in 1945 by the Chief Conservator of Forests, Waterer, provides an insight into the accepted view of the customs of the mountain shepherds, especially their propensity for setting fires[3]. His report begins by pointing out that the popularity of free range goat grazing lies in the fact that goats can "pick up a living by parasitic grazing in a manner that no other domestic animal can compete with." He continues to note that, "The greatest damage that has ever been done to Cyprus forests has been that by the grazing

[2] See Butzer (1996) for a discussion of the diverse Mediterranean polyculture which was based upon multiple subsistence practices including agriculture, herding, viticulture, and fruit tree plantations. One would assume that Cypriots would have practiced a similar risk management strategy, in which case it would not be unusual for people to practice several of the different livelihoods as defined by the British.

[3] One should note that Waterer is making these claims after the successful buyout of many of the Southern Range goats, as well as note that Waterer is frequently concerned with illustrating that the forests are the "people's forests". He apparently has a limited definition of who are the "people".

flocks, mostly of goats, and their shepherds who have been responsible for a very large proportion of the disastrous forest fires that have wasted out the people's forests by fire and irreparable damage." As he explains the situation, there has been recent success at eradicating most goats from the main forest. However, the public and the forest officials cannot relax yet, as other shepherds will step forward to take the place of the removed shepherds; they will "exert an enormous pressure to infiltrate and graze their ever hungry flocks unlawfully on the vacated grazing lands of the interior." Therefore, "It is easy to see that this never ending war against unlawful grazing creates a state of friction that nearly always culminates in malicious firing of the forests by the shepherds" (SA1/857/1945/1).

Waterer does not stop there, but even provides a hypothetical situation involving a landless shepherd in order to further emphasize the evils of goat grazing. This shepherd will terrorize the landowners upon whose land he illegally allows his flock to graze, threatening to give them a "sound thrashing" if they report him, or to even "go to their lands at night and uproot their trees and vines and steal their animals." Everyone will know who did it but will be too scared to say anything. The forest staff will report him frequently, he will have to pay fines and spend a week or two in jail, but his flock will keep being grazed in the forest as usual by his family during this time. He will blame the local forest guard personally for all of this, building up a hatred for him, maybe even coming to blows with him. "In a fit of rage and revenge on his enemy he sets fire to the forest at many different places and the whole area is burned out" (SA1/857/1945/1).

Waterer's account may appear over-exaggerated and solely designed to excite the public to action, but nonetheless it is a similar version to his which has entered into the secondary literature on the topic. As Thirgood (1987) explains the situation several decades prior to Waterer's account, there were "waves of incendiarism" (122) in the 1910s.

> It was only to be expected that the people would resent and contest the unwelcome restrictions placed on their free use of the forest and, increasingly, as it was realized that Government valued the forest, arson became a means of retaliation. That malicious firing should have been adopted by uneducated villagers as a form of expressing their disapproval of any petty restrictions which they might experience, or later as a form of political dissent, is hardly surprising (124).

This version of the history is commonly accepted as fact, and it has found support in accounts from other countries which point to the use of fire as a political protest, as well as from Cyprus' own modern history itself. However, it is a history built upon assumptions, rather than firm evidence. There are no clear reports with supporting data that revenge driven fires set by unhappy residents form the bulk of the Cypriot fires. Rather, the idea appears to be linked with the equally false notion that all shepherds are wild and lawless inhabitants. The picture is simply not as clear cut as that.

CYPRIOT FIRES AND THE DEVELOPMENT OF THE BRITISH APPROACH

As noted in Chapter 2, there is a long history of fire use within the Mediterranean as part of land management practices. Controlled burns to produce better forage for animals, clear out dry undergrowth, and prepare fields for planting outside or within the forest were a common occurrence in the Mediterranean. Furthermore, the summer-dry Mediterranean climate certainly did little to prevent or dampen fires caused by natural causes (e.g. lightning strikes) during the hot summer months. At the time of British arrival, fires were most likely a well-understood aspect of forest management on Cyprus, whether purposefully or naturally set.

The early foresters, such as Madon, recognized this aspect of fire use in the Mediterranean. Had Madon, who classified the motives behind the setting of the fires within his reports, continued as the PFO, the situation on Cyprus might have been somewhat different. However, following the delimitation of forest land on Cyprus, the

approach to fires on Cyprus began to increasingly focus upon their illegality, as opposed to their cause. In other words, the main point of emphasis became not the reason behind setting the fire, but that the fire had been set at all; delimited forest land was state forest land, and as such, setting a fire in the forest land was a punishable offense. The progression to describing the majority of them as being set maliciously is easy to follow in this context. It removed the need to fully investigate the causes behind the fires as one was readily available to utilize. Furthermore, it increased popular support in the Forest Department's goals of removing goats and shepherds from the forest. It is more difficult to sympathize with the image of a crazy shepherd who destroys state property for no reason other than vengeance than with a shepherd who lights small fires to improve the grazing area for his flocks.

This is not to say that none of the British foresters following Madon recognized that fires were set for a multiple number of reasons. The archival minute papers illustrate that several different colonial officials recognized the complexity behind the causes of fires. However, for the purpose of public reports, this understanding of multiple causes was increasingly simplified to the accepted history presented above - all fires, regardless of size or motive, were illegal actions set by Cypriots desiring retaliation. This understanding of the British conflation of fires with malicious actions, combined with the below outline of the economic status of the Cypriots during the colonial period, provides the necessary framework to begin the process of reinterpreting the numerous offenses and fires

THE ECONOMIC STATUS OF THE RURAL POPULATION

The rural inhabitants of Cyprus have frequently been presented as poor, surviving on a day to day basis for most of their existence. Questions had been raised concerning the

poverty of the inhabitants by the late 1880s, when the colonial officials had already realized that the Cypriots preferred jail time over a fine (SA1/712/1889).

. Other authors have argued that prison time simply was not a stigma to the same extent as in the British culture (see Bryant 2004). However, there is another aspect to prison time – the provision of food and shelter. Hard labor could also be required, of course, but how difficult that labor was is open to question. One set of files from the early 1890s shows that the Central Medical Officer shut down the pounding of bark within prisons out of concern for the effect of the dust on the prisoner's health[4] (SA1/2822/1891).

Complaints regarding the level of poverty of the Cypriots also can be found within the Legislative Council addresses during the 1890s and 1900s. By 1918, the condition was severe enough so as to form a commission to investigate its level among the rural inhabitants. This commission implicated the poor money management of the Cypriot combined with the ruthlessness of the usurer for the level of debt (CG Extra 1333 1918: 171-181). A famous report by Surridge from 1931 also roundly criticized the rural moneylenders, whether Cypriot or foreign (SA1/486/1931). In these depictions, admittedly commissioned by British officials and likely presenting the data in a manner the least harmful to their rule, the Cypriots money-lender had developed quite a racket by fleecing his ignorant rural country men.

Although these reports predominantly focus upon the agricultural poor, one can safely assume that the situation of the goatherd would likely not have been much better, and perhaps even worse than them. Although the British environmental legislation was typically designed to help and support the agricultural poor, the role of the environmental policies in creating, or allaying this rural poverty is rarely analyzed. It is clear from the available history that one could not just erase the goat from the village economy nor

[4] As comparison, the Forest Department prided itself in later years with providing work for some of the mountain inhabitants and even took pictures of some of the grateful inhabitants depicting this relief work. One of these picture showed women employed in breaking stones for roadwork.

could one by a simple order in council announce in the Gazette that certain areas of forest were reserved from pasturage and wood fuel gathering without seriously affecting the lives of the rural Cypriots. Yet, this was precisely what the British policies were designed to accomplish. As shown within the delimitation files, the foresters were completely entrenched in the view that the forest was their State Land, to develop as they please, and their treatment of native Cypriots certainly reflects this attitude. In most cases, no matter what type of documentation the Cypriot might provide, the delimitation commission would admit no claims to forest land and if questioned would argue that they were legally justified in doing so. In the British eyes, the forests had developed into a no-man's land during the Ottoman period, owned by none except the State and illegally used by many. For the British, the delimitation (i.e. demarcation) of land therefore had been necessary in order to clearly illustrate that the state was claiming its land and to further enhance the ability of the state to punish any trespassers, regardless of their reasons. The true situation, which the British either could not see or did not realize that alternatives were not as easily available as they imagined, was that the rural inhabitants depended upon the forest products for their daily livelihoods. The refusal to allow use of such products could either make an already fiscally troubled peasant go into an even more dire state, or it could on its own send a peasant into financial difficulties.

The situation became worse during World War I. As noted in Chapter 4, the easily accessible forests, often utilized by peasants exercising their customary rights over the forest lands, were razed, removing a source of fuel wood and grazing grounds[5]. As noted previously, the arrival of Unwin only intensified the issues. Solely focused on making the forests commercially successful, Unwin applied the laws to their utmost stringency while at the same time suggested price increases on a number of items, including the import

[5] From 1918 to 1919 there was also a standing order that no male goats could be slaughtered in case there was a need for them for the war effort (CG Extra 1329 1918: 119, CG 1377 1919: 243). Michaelides (1999: 5) suggests that nearly one sixth of the forests had been clearcut by the end of the war.

duties on timber (SA1/813/1922/1). Again, there was a lack of understanding as to whether the peasant could afford to live under these new policies. The situation of the rural inhabitant was only made worse by the world wide depression in the 1930s, coupled with a multiple year drought on Cyprus during the early 1930s. To Unwin's credit, he did apply for permission to employ rural inhabitants in relief works in 1933, and he had been employing locals in activities such as road construction, although his motives are not all angelic. He had been told by the government that his budget was going to be much less than he desired, so relief work would be a way to get more money into his department. Further, as he pointed out, it was fiscally best to do the work during the time of depression as the cost of labor would not be this cheap again (SA1/444/1933).

The economic situation of the rural inhabitants had only a brief respite with the retirement of Unwin and the improvement of the economy before World War II created another period of intensive felling. This war felling was a boon to woodcutters (some of whom had been shepherds), as they were guaranteed consistent employment. To all else though, it represented a time when the entire timber supply of the island was devoted to the war effort with very little, and then essentially none, left for local use. By 1944 the timber supply was so scarce that a mandatory fuel oil scheme was enforced, although there were issues with supply and price (Waterer 1946).

A personal account from one of my informants regarding the level of wood fuel scarcity during this time can help to envision the situation during this period. This informant grew up at the base of the foothills of the Troodos and he spoke of how people would rush out to the river when large rainfalls occurred, with the hope that the torrents of water would also carry fallen wood down from the mountains with it. His job was to stand and guard the wood they had collected until provisions could be made to take it back to the house, as if it was left unattended, someone else would take it. This informant also spoke of the fuel oil process, and he still remembered without hesitation the name of

the man who set the fuel oil prices. As he explained, the man's job was so important that his name was a common household term during that period.

Following World War II, the rural inhabitants continued to immigrate into larger cities in search of jobs, a trend which began in the interwar period. Most of these immigrants appear to have found jobs, so the move in that sense was successful. The era of a predominately rural and poor Cypriot population was already waning by the 1950s on account of these trends.

SITUATING FOREST "OFFENSES": CYPRIOT RESPONSE

Within the economic setting outlined above, the British policies had directly altered the means of livelihood of all members of the rural economy, including the shepherd, the woodcutter, and even the villager with fields who was accustomed to receiving free firewood from the forest or waste lands. Since the British foresters were so driven to preserve and utilize for their own use the island's forests, woodlands, and even lands which theoretically could be forested but were not at that time, with little or no recognition of the inhabitants' prior claims, what options were open to these Cypriots to enable them to survive?

Based upon the archives, one possibility appears to have been to create their own work via activities which they Forest Department classified as offenses, especially fires. Unlike Thirgood's statements regarding forest offenses that "There was no realization on the part of these people of the damage they were inflicting on the forest or of the effect these practices would have on future generations in their villages" (1987:125), the inhabitants were likely fully aware of what they were doing. In fact, a certain number of the fires recorded may have been ones that would have occurred as part of the normal economy regardless of the British presence. Based upon accounts of other Mediterranean

ecosystems (see Grove and Rackham 2001), periodic firing of the forest to obtain better pasture was a common practice, one from which the forest would recover. Thirgood (1987) himself states that "It had been traditional practice for the shepherds and the fuel transporters to fire the forests in rotation to produce better browse within reach of the goat flocks, or alternatively to produce dry fuel for the fuel markets" (125), and there appears to be little reason to question that statement. Further, as noted in Chapter 3, it is likely that large fires naturally periodically swept through the forests.

In other words, the inhabitants already incorporated fires into their normal management schemes, and they therefore knew how to gain work from forest fires. Madon, the PFO from 1880-1882 certainly realized this, as he states that the majority of forest fires during his period are not malicious. A table showing the suspected causes of the 26 forest fires which occurred between April and October of 1881 only attributes one fire to the work of incendiaries, the rest being attributed to land clearance (14), to shepherds specifically (2), to planting vines (1), to fuel making (3), to "passers by" (3), and to unknown (2) (SA1/2136). However, when this report is summarized to send to Kimberley, Biddulph lists the causes of fires as clearing land and improvement of pastures, but also includes intentional fires set by villagers in that general list, with no qualification as to the number of "malicious" fires (Corr. 1882: 16). Lest there be any doubt as to Madon's view of the forest fires, he re-emphasizes the lack of malicious firing in a second message to Kimberley. It was too late, however, as the concept of purposeful malicious fires had already become part of the primary equation by that time, and Kimberley appears to accept this, since, as discussed previously, he warns Madon and Biddulph to ease off the forest policies partly out of concern that upset villagers will light more fires.

Despite Kimberley's and Biddulph's emphasis on malicious fires, one can find reports within the archives which illustrate a more complex story. In a case from 1894, the

Commissioner of Paphos deliberates as to whether to allow villagers near a forest fire to process the burnt timber. He thinks they may have started it because they were looking for work, and he does not want to allow them to benefit from the fire. Because of logistics, however, he sees little choice but to have the villagers work the timber. At the same time as he is discussing how the likely motive of the fire was to create work for the villagers, however, he also discusses his concerns about "the revenge of persons affected by the withdrawal of grazing and other privileges" (SA1/2381/1894). Thus, he understands that the particular fire he is currently trying to manage was likely set out of a desire for employment, but he still conceptualizes fires as being caused by vengeance[6].

A second file from 1894 further represents some of the issues with the early assumptions about forest offenses. A forest officer had accused villagers from the Limassol District of girdling over 200 young pine trees in an attempt to get even with him while he was away at the District Court. He reports this story to the Commissioner of Limassol, who immediately believes him without asking any additional questions. The indignation of the British officials is quickly raised, and the Forest Department starts working through the paperwork and the legal ramifications of taking away all of this village's forest privileges as punishment for the heinous deed (SA1/1574/1894).

However, when the Forest Department sent woodcutters from a nearby village to harvest the damaged trees, the report from them was vastly different. They had not found a set of 200 trees freshly girdled in a spate of vengeance, but rather only around 20 or 30 old girdled pine trees, a number too small for them to bother processing. A further investigation into the matter revealed that the Forest Officer had never visited the locality

[6] A common theme within the archives centers on how to work burnt timber and the advantages and disadvantages of the methods. In each of these files, there is a recognition that the fires may be serving the practical purpose of providing employment for out of work mountain inhabitants. Bovill from 1918-1921 employs a policy of leaving burnt wood to rot as opposed to allowing the villagers benefit from working it, although this approach is also strongly questioned by other foresters on account of the increased susceptibility of the forests to beetle infestations with the presence of the dead wood (SA1/460/1934/1).

himself, and when confronted, he in turn blamed the villagers for providing him with false information. The comment of the PFO (Young) regarding the forest officer in question makes a fitting, yet ironic, conclusion to the tale, as he notes that "Such a chap wd lead villagers to ring trees" (SA1/1574/1894). As opposed to learning his lesson that not all acts of reported forest destruction are committed on account of vengeance, and more importantly, are actually real, the PFO instead walks away from the incident with the idea that the Forest Officer's behavior would certainly lead to vengeance!

Several years later in 1899, Young (now the CS), echoing Law's earlier concerns as PFO, writes to Bovill (current PFO) about the harsh manner in which the 1889 Forest Law is being applied. The Legislative Council had been complaining about it, and he suggests that a set of general instructions be provided to the forest officials so that they "may be in possession of the lines on which they shd act before instituting prosecutions against persons for being unlawfully in possession of timber" (SA1/1837/1899). While the instructions which are drafted by the QA do not address why the accused are supposedly committing the specific offenses, they are illuminating as to the behavior of the Forest Department at that time regarding how they defined forest offenses. The officers are reminded of the following points:

1. They need to make sure they have proof of the supposed crime before sending the case to court.
2. They should only issue offenses for clear and distinct breaches of the forest laws, "and not to make charges which involve delicate questions of title – as whether a particular tree is or is not a few inches over the boundary of the accused, or whether the brushwood in a stream which bounds a holding belongs to the holding or not – There are plenty of real and substantial breaches of the Forest Laws."

3. They should not prevent people from cutting trees on private property. The current interpretation of the forest law may allow them to prevent the private individuals unless they have a permit, but "its soundness is questionable. It cannot be right to prevent people from doing what is lawful. This system has I think led forest guards and officers into the belief that they are justified in bringing before the Court any person who is in possession of wood without a permit."[7]
4. "Persons are sometimes brought into Court upon charges of being in unlawful possession of materials, which, though technically 'forest produce' cannot be of much value even from a forest point of view – such as gorse, gum cistus etc - I think hardship occurs from persons being brought into Court upon such charges" (SA1/1837/1899).

The pre-existing behavior which emerges from the QA's instructions is one of over-zealous forest officials, in which any action, whether legal or not, is likely to result in a forest offense for the person. One may assume that this type of behavior would also have had an effect on the number of forest offenses reported and it could help to explain the customs of several of the district courts to treat forest offenses with much leniency (e.g. SA1/1972/1886, SA1/1011/1888, SA1/2253/1891). The last sentence in point three deserves special emphasis, as it is especially telling as to how "offenses" are defined. Recalling the discussion of the Ottoman Land Code from Chapter 5, the British did indeed believe that the vast majority of forest ladn was state property. As such, any fires, grazing, or woodcutting which occurred on those areas was by default an offense. Distinctions are rarely made in the surviving records as to the reasons behind these "offenses", although they are classified as to the type of offense. Therefore, a small brush fire set to clear out scrub and encourage new vegetation would be placed into the same

[7] As discussed in Chapter 4, one sees here a clear case whereby the fact that the law allows for a certain prosecution does not mean that it should actually be applied.

category as a fire set to burn a neighboring field before planting it (a common practice) which got out of hand, or even a fire set by an unhappy resident wishing to protest the British rule[8]. This fixation on the type of offense while at the same time lack of clarification as to the causes behind it prevented the British from fully understanding the situation on the ground. It also complicates any efforts today to understand the events of the period.

There are numerous fires over the remaining years of Bovill's tenure and presumably at least an average number of forest offenses. Unfortunately, however, there are little data; as Bovill himself notes in 1920, there are no annual reports or periodicals published by the department during his tenure (4). Although Hutchins (1909) attributes several large fires within the Northern Range to repeated incendiarism by unhappy shepherds, there simply are not enough available accounts to conclusively describe the reasons behind these fires, especially as the shepherds in the Northern Range were presumably accustomed to setting periodic fires for improved pasturage. As for general offenses, these are only randomly mentioned in several archival files which detail unhappiness with Bovill's policies, but again the amount of detail available from previous or later periods is lacking.

At the least, Thirgood's comments concerning the period that fires represent arson and that "overall, the resources made available to the Department were insufficient for the task confronting it and all early attempts to check the destruction of the mountain forests by fire and grazing succeeded only in illustrating the difficulties" (133) are open to question. In fact, Thirgood (1987) himself, in two separate sections, allows for other causes than incendiarism. In one almost off-the-cuff statement, he notes that "in addition

[8] A good way to avoid detection while lighting fires, according to one of my informants, was to light a large candle at the base of a tree or cluster of dry vegetation. By the time the candle burned down through the wax to the underlying vegetation the person who had lighted it could be quite a distance away from the fire.

to these malicious fires there was the ‘normal’ customary firing” (125) after detailing the “immense damage caused by a tiny minority” of arson minded shepherds. In a later statement, he notes “The majority of fires were intentional, resulting from some grievance; or by shepherds, to improve the grazing; or by timber contractors, to obtain contracts for removing the timber” (162-163). Just as Biddulph a century prior to him, he recognizes that there are multiple causes behind forest fires, but he prefers to focus upon that of vengeance when he wants to make dramatic statements.

The amount of available data increase going into the Unwin period, and this data indicates a spike in forest offenses, peaking at close to 10,000 offenses per year. As the population of the island was only around 348,000 in 1931, this represents a sizable number of offenses. As a later commentator noted in 1936, something was “radically wrong” with the number of offenses recorded during this period (SA1/488/1936). Along with the forest offenses, several large forest fires dominate the 1920s, leading to a Forest Enquiry Committee and a visit by a foreign expert (Troup) by the end of the decade as noted in Chapter 6.

The accepted history behind these increased offenses and fires is provided by Thirgood. He states that “The 1920s and 1930s … was also a period when forest grazing reached its greatest intensity and when forest destruction, especially through arson, but also through illicit cutting, reached catastrophic proportions” (171). As the newspaper acounts of the 1920s complained, and despite the creation of an enquiry committee, the reasons behind these increases are only superficially exposed. Most commonly, the increased number of offenses and fires as seen on their respective graphs (Figs. 7.1-7.4) are ascribed to unhappy residents, and presented either as a picture of the ignorance and law-breaking nature of this worthless class of people, or as a picture of a rural class firmly devoted to resistance and openly fighting the unfair policies of a tyrannical Unwin.

The reality, as always, is likely far more complex. Gordon (1955) notes that "a high crime rate can usually be accounted for only by one or other of two factors, either (1) *Crime pays*, or (2) *There is some necessity of existence which cannot be obtained lawfully*" (Gordon 1955: 414). Keeping Gordon's points in mind, the Forest Enquiry Committee noted in 1928 that "The number of cases of offenses taken up during the ten years 1917/26 was 64,145.…At first sight it would be thought that the fines inflicted would put a stop to indiscriminate theft, but this is not so. The same persons are convicted over and over again. Villagers openly boasted that it was worth their while, as the profit they made easily paid the costs of the few times they were caught" (SA1/847/1928). That statement points to both of Gordon's factors, although the Forest Enquiry Committee itself seems more centered on the idea of crime paying. However, as explained below, the second factor likely may have been true as well.

The most common type of offenses (predominately unlawful possession, followed by unlawful grazing, see Fig. 7.4), combined with the knowledge that the timber requirements of World War I and Unwin's strict policies had sharply limited availability and access to the island's forest resources, suggests that at least a portion of the offenses may reflect more accurately a need for grazing areas or or timber or fuelwood on the part of the inhabitants than numerous acts of vengeance. The issue again is the unresolved question of motive: Unwin, who recognized the poor financial status of the mountain residents, thought relief work needed to be instigated on forest political grounds, if nothing else. By doing so, it would prevent the starving peasants from lighting fires in the winter on political grounds and also to create work (SA1/444/1933). Unwin has recognized one key aspect of the situation (poverty), but he then just barely sidesteps fully understanding the next step in the situation (committing "offenses"). It is more reasonable to assume that starving inhabitants would light fires and/or commit other forest offenses if they felt that it would create work for them or would give them the

products necessary for their survival than it is to assume that they would make the effort to light fires and commit offenses solely for vengeance or political reasons, yet it is political reasons upon which Unwin stakes his argument. In the Cyprus setting at this time, following Gordon's points, crime does pay (e.g., the issues with finding workers to harvest burnt timber discussed previously) and there is a necessity that cannot be met lawfully[9]. It further explains the willingness of the villagers to repeatedly risk prosecution, as noted by the Forest Enquiry Committee, as well as the continued preference of the Cypriots for jail time over a fine. For someone already experiencing difficulties staying fiscally afloat, jail was without doubt preferable. As noted by Waterer in his comments at the beginning of this chapter concerning grazing offenses, a family member could be called upon to mind the animals while the jail term was served. Further, jail would include food and shelter, also meaning that there would also be one less mouth for the family to feed during the prison sentence. The alternative, a fine, would most likely mean selling one's livelihood. Confiscation of the flock, another possible punishment, was only a concern if the flock was wholly owned by the shepherd, which in many cases it was not.

This interpretation is rather different from Thirgood's statement that "The early 1930s saw further arson. While there was a background of political unrest, most of this destruction was caused by forest graziers who still resented any form of control over activities" (169). Further, it supports the questioning and reinterpretation of another colonial assumption, namely that the inhabitants needed to be patiently taught to respect their environment so that they would not harm it through acts of vengeance. The inhabitants did not need a forest education; on the basis of the traveler's accounts and maps they had been sustaining a livelihood within the forests for centuries. What they

[9] It is worthwhile to recall from Chapter 4 that Unwin had set the price of timber so high in government store houses during this period that residents found it cheaper to buy imported Romanian timber (SA1/460/1934/2).

needed was access to fuel and timber and a grazing area for their goats so that they could continue with that well-suited lifestyle[10], and these are the demands one finds within their complaints in the archival files, as well as the activities they are arrested for carrying out within the delimited forests.

The fact that these demands fell during an increased period of fuel and timber scarcity, along with an increased reduction in the amount of available grazing grounds as discussed above is not a coincidence. There is a complex situation of tensions in Cyprus during the 1920s and early 1930s. Limiting the rights to fuelwood, timber, and grazing areas would certainly make the rural inhabitants unhappy with the British government, and certainly some of the offenses and some of the fires may represent actions conducted out of spite to get even with the government[11]. However, interpreting all the offenses and fires as illustrating an uninformed destruction of the natural habitat by villagers angry at Unwin is simply incorrect. Unwin may have been disliked by many[12], but the residents did not spend their time committing forest offenses in order to specifically upset him.

Further support for the assertion that the motives behind the forest fires and offenses can be better understood by considering the impact of the tightening forest policies and the resulting struggle to support a family rather than focusing specifically on vengeance can be seen in the events during World War II. As the grazing buyout scheme had begun prior to the war in 1937, following the British assumptions about shepherds and fires, one might assume that a drop in the forest fires would occur (whether the fires were being set for spite or for improved pasturage). As can be seen from Figure 7.1, there is actually an

[10] Further, for many of them, the only lifestyle available to them, especially for those with no agriculturally productive property, those who had been arrested in the past from forest offenses and were thus unable to engage in any available Forest Department work, or those who were physically unable to carry out the Forest Department work.

[11] In fact, one of my informants stated that he had lit a fire solely in order to get even with the forest officer over a perceived slight while he was still a teenager.

[12] Although, as noted previously, the inhabitants likely had stronger feelings about their district forest officers than Unwin.

increase in their number in the early 1940s. An account of the period states that the number of malicious fires peaked in 1944, although extensive fires occurred again in 1945 (SA1/857/1945/1). [13] The accounts do not specify where every fire occurred, but the ones given the most attention took place within the Southern Range forests. Since the Southern Range had been freed of almost all shepherds at that time, who or what was causing the fires?

The archival accounts, perhaps not surprisingly, point to revenge and political motivations, although they need to be a bit more creative now than in the past as their favorite scapegoat, the mountain shepherd, now supposedly no longer exists. For example, as Waterer notes, “There is no doubt that a large proportion of the old time disastrous fires were set by the forest shepherds for various reasons” and removing them did take care of some of the worst causes of fire. However, now there are other obstinate shepherds who live outside of the forest and are trying to capitalize on the removal of the shepherds within the forest by grazing their own flocks within the forest areas now deserted. They continuously quarrel with the forest staff and receive offenses for unlawful grazing, but “the courts unfortunately very seldom ever give a deterrent sentences for such offenses no matter how many previous convictions there may be. In the end this culminates in isolated outbreaks of malicious firing”. As Waterer explains the situation, these disgruntled shepherds have “nothing to lose and only something to gain, for a fired area produces better grazing” (SA1/857/1945/1). However, it is not just the disgruntled shepherds, Waterer notes, but also “the presence in the forests of a gang of absconded murderers who are the armed champions of the shepherds and any other bad characters” (SA1/857/1945/1) who must be blamed.

[13] Although this increase in fires does not correlate to an exceptionally large area of forest burnt (see Fig. 7.2), an aspect that the Forest Department takes credit for by arguing that it is on account of the ever increasing efficiency of their well trained fire fighting service.

There is very little evidence to support either of Waterer's claims, especially since, whatever is happening, the Courts do not see the shepherds as committing a serious enough offense to fine them severely. However, it is striking that Waterer's new explanations for forest fires sound rather similar to that provided concerning the stereotypical shepherd through the years. While admittedly the gang of absconded murderers is a new twist in the story of forest fires, it still appears that Waterer is applying a ready-made scapegoat to answer questions which the British either could not or did not want to explain themselves.

An account from an informant of his practices leading up to and during World War II present a more verifiable account of the situation within the forests at that time. He came from a family of seven children, and in 1935 his father was a shepherd with a flock of about 80 sheep and goats[14] for which he had a forest grazing permit. The informant himself, although only thirteen years old and officially too young for such employment, had just finished working on a Forest Department road construction project, but no other jobs were available at the close of the project. Since his father was one of the forest shepherds whom the Forest Department was trying to convince to discontinue keeping animals in the forest, the department tried to show its benevolence as well as its determination to help these last shepherds and their families adopt a different, "better", lifestyle by arranging for both the informant and his brother to attend school at Stavros tis Psokas[15].

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[14] Although the informant did not specify the exact reason why his father had 80 sheep and goats in 1935 (at an earlier time the family had owned over 200 animals), it is interesting to note that 80 was the initial number allowed per shepherd assigned by the Shepherd's Licensing Law, 1935.

[15] This recognition that the department could not expect the goatherds to give up their goats if they had no other livelihood to which to turn was realized by the earliest colonial officers and most of those following. It underlaid Bovill's attempts to give perks (in the form of land, trees, money) for passing the Goats Law, and it also underlaid at least part of Unwin's actions. Money was often a concern, and it therefore gained renewed emphasis with the beginning of Waterer's reign and the following increased amounts of funding, as discussed below. Propaganda campaigns ("whispering campaigns") were launched throughout the 1940s by sending informants into the more remote villages, especially those which the department desired to completely move, to preach the benefits of life in more populated areas (Polycarpou 1969).

My informant did not remain in school for long; however, as by 1937 he had started working with his father making rafters by hand, a business which they had discovered to be lucrative at that time. His father had not yet sold his sheep and goats, but he would soon after Kykko Monastery's decision to sell its goats in 1938, when his father and many of the other flock owners were pressured into selling their flocks as well. His father bought 20 sheep to replace his flock, and the Forest Department once again tried to help the family adjust to a different livelihood, as well as provide an extra incentive to his father for selling the flock by offering to employ the informant and his brother as Forest Department laborers. His brother accepted the position, but my informant turned it down as he realized that it was more profitable to be a private woodcutter. In 1940 he was earning between ½ to 12 shillings a day as a private woodcutter, while a forest laborer at that time was only earning about 1 shilling a day.

The winter of 1940 had been a hard one, and there were many felled trees, but the people around the forest were too poor to buy the trees and work it themselves. Further, the British did not want to sell the timber to the villagers in case it was needed for the war effort. The informant took advantage of this situation, and he would go through the forest working the timber that nobody else was touching, and then sell it for 2.2 shillings per cubic feet in the forest or 2.7 shillings per cubic feet in towns. He continued doing this until 1946, when the wood supply was just too scarce to continue, and he accepted a job with the Forest Department at that time[16].

My informant did not specify whether his woodcutting was legal, and I did not ask. Legal or not, however, it appears that he was not the only one who realized that more could be made through private woodcutting than through the jobs provided by the Forest Department.

[16] As a further indication of the scarcity of fuelwood, prices in Nicosia in July of 1946 were set at 10 paras per oke or 22 shillings per cord fuelwood of pine, acacia, cypress or juniper and by September of 1946 they were at 30 paras per oke, 66 shillings per cord (*Cyprus Gazette* 1946: 239, 309).

> In Cyprus during the second World War such large profits could be made from forest theft that it is really surprising that forest villagers ever engaged in lawful employment. An habitual forest thief recently informed the writer in confidence that his net earnings from thefts of timber and fuel between 1940 and 1944, after all fines and expenses had been paid, were three to four times as much as the standard labourer's wage (Gordon 1955: 342).

My informant, as the individuals mentioned by Gordon, realized that private woodcutting was a lucrative business at the time. Further, my informant had the option to work for the Forest Department during that time, so he did have the option of being engaged in lawful employment had he desired to be. However, at the same time, Gordon seems to trivialize the reasons why the inhabitants would undertake forest theft in the above quote. The additional money my informant made through private woodcutting did not go to buy him some new toy, but rather to support his family. In a context such as that, it is difficult to fault a person for taking the opportunity to earn as much as possible. Indeed, perhaps even some of the British officials had difficulties faulting the inhabitants - according to my informant, the district forest officer knew what he was doing during the war, but he nonetheless still kept the Forest Department job waiting for him until he decided to accept it.

Following World War II, the number of forest offenses does finally decrease, although the number of fires increases again during the EOKA period. These figures correlate with a continuing trend of rural to urban migration, as well as a forest staff focused less on catching people committing offenses and more on building up and marketing the forest stock. They may also reflect a reduction in access as well as demand thanks to the island-wide scarcity in timber and the shift to fuel oil which resulted from World War II. It must also be noted that the duties of the forest officers were strongly curtailed during the EOKA period owing to concerns about personal safety during the period, so it is possible that the low numbers give a false impression of the situation on the ground (see *Annual Reports of the Forest Department* 1956-1959).

CONCLUSION

In sum, when faced with the record of forest fires and offenses on Cyprus, one can assume several different scenarios. The accepted scenario points to disgruntled shepherds and rural inhabitants, who are said to not have understood the harm their actions had on the forest, undertaking the majority of the forest offenses and fires as their own way to protest the forest situation. This accepted scenario vastly oversimplifies and misrepresents the situation that emerges from the archives and interviews.

Even from the earliest periods, fires are not primarily malicious, no matter how frequently the assumption is repeated. Rather, interpreting this history comes down to a question of customary use (including the land tenure issues raised within Chapter 5), poverty, and employment. During the peak in forest offenses, the inhabitants were in the midst of a depression and a drought; they could not buy timber from the timber stores on account of the cost and the areas in which they could graze their flocks were being strongly curtailed by pressure from the Forest Department in both the forests and the hali lands as well as pressure from agriculturalists using the Field Watchman's Law and the Goats Law to their benefit. Their behavior does not reflect that of an ignorant peasantry unable to understand the harm they are doing to their own environment. Rather, it reflects that of a peasantry left with no other options on account of the colonial policies, who furthermore understand that much of what they are doing is not harmful but part of the system of land management they had practiced in the past. In this sense, the inhabitants' acts can be seen as a form of resistance, but resistance with a purpose to avert starvation and financial ruin, an intent far greater than simply protesting colonial policies. There is no reason to doubt Gordon when he states that "Cyprus has probably the highest rate of

detected forest crime of any country in the Empire" (1955:358). The challenge for the future will be to ensure that we interpret those perceived crimes correctly.

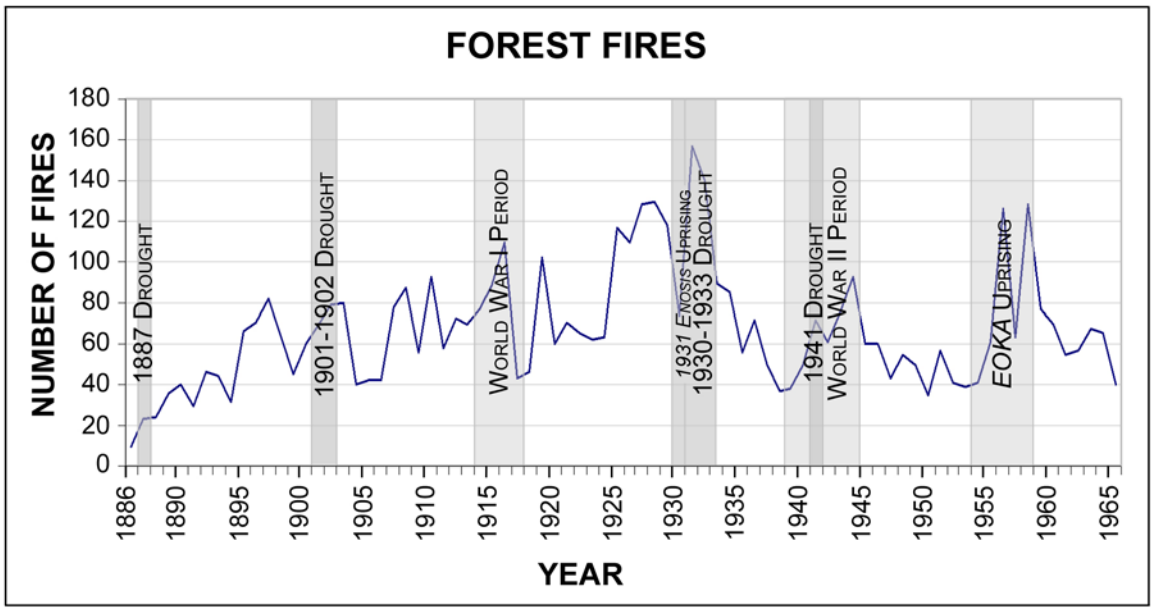

Figure 7.1. Number of Forest Fires in the State Forests, 1886 to 1965

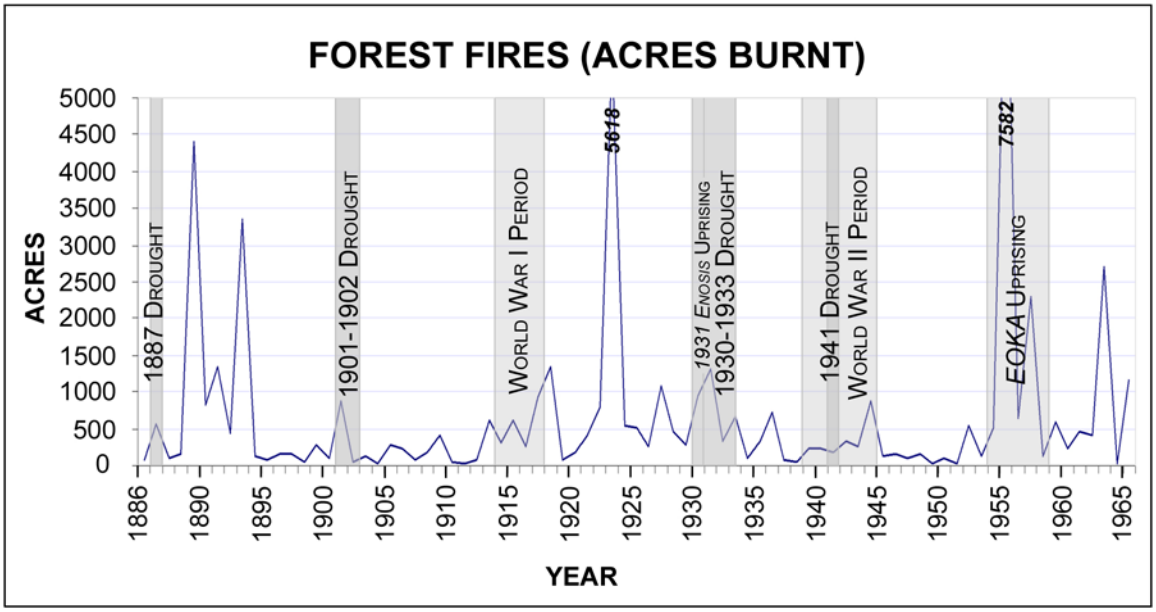

Figure 7.2. Acres of Land Burnt by Forest Fires, 1886 to 1965

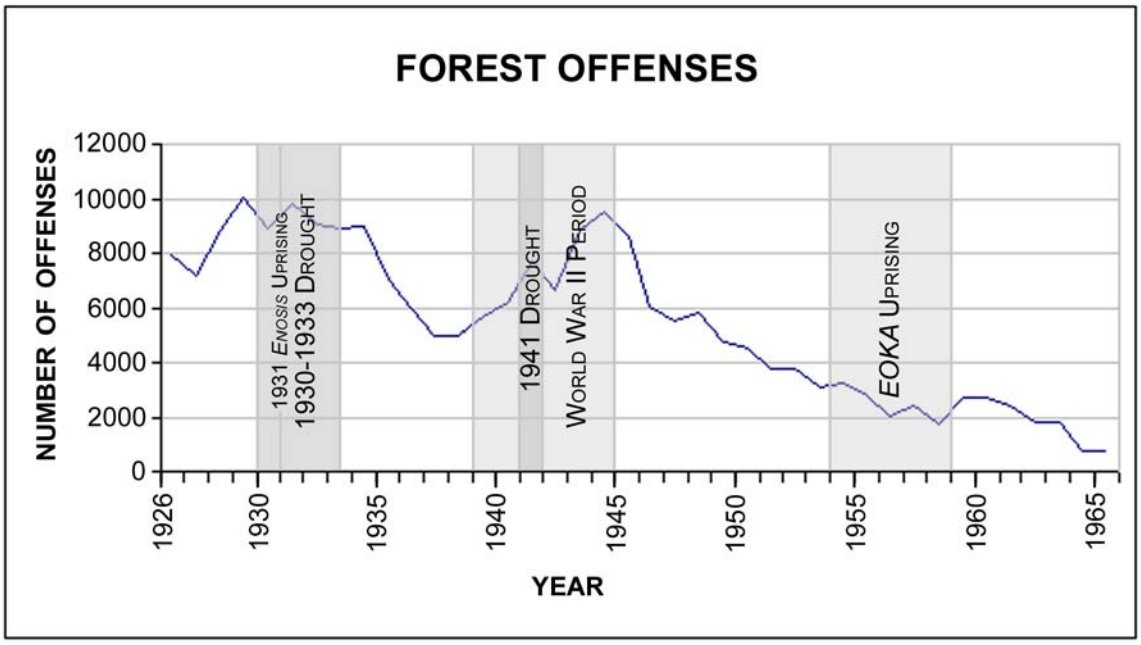

Figure 7.3. Forest Offenses 1926 to 1965 (limited data available pre 1926)

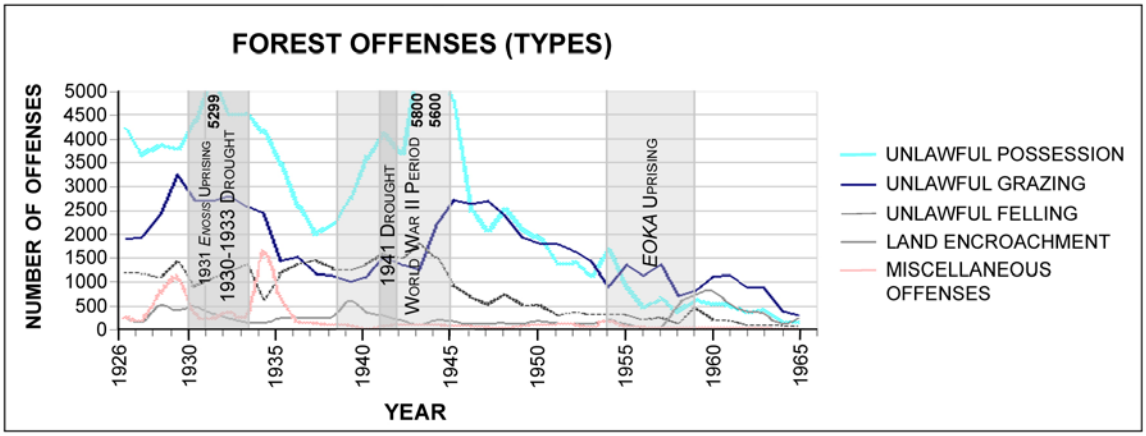

Figure 7.4. Types of Forest Offenses 1926 to 1965

Chapter 8: Conclusion

With the revised knowledge of both the physical environment at the time of the British arrival and the issues during the British period concerning the forests, an updated understanding of the human-environment interactions in the Cypriot forests can finally be formed. This updated understanding centers upon the identification of several misunderstandings of the Cypriot environment and its people by the British, as well as a more contextualized view of the colonial process itself, a view which is generally not supported within the current examples of postcolonial thinking. Many of these points are alluded to in the previous chapters in which the evidence to support them is provided; the purpose of this chapter is to summarize the points within a central location.

MISUNDERSTANDINGS

1. The British assumed that the majority of the island's forests during the Ottoman period were utilized as an unregulated commons, free and open to all to use and abuse as they pleased. By making that assumption, they justified their own state claims to the forests and in turn their prohibitions of many of the activities the inhabitants were accustomed to carry out in the forests. That assumption was incorrect.

Instead, it appears that there were customary rules regarding forest activities, and that the primary bodies regulating that use in several of the forests were the monasteries. Both travelers and secondary sources (such as Given 2000) note that the monasteries, scattered throughout the forests, had their own goats and well developed gardens. Sources also point to the power of the monasteries, which remained strong during the Ottoman period through their collaboration with the Ottomans, as well as to how they quickly expressed

frustration with the British ideas of equal treatment for all as they had become accustomed to their special privileges (see Katsiaounis 1996, Bryant 2004). The archives contain many petitions from the monasteries during the process of delimitation (roughly 1882-1896) which emphasize their traditional rights over the lands and express their outrage at the confiscation of those rights. It appears that the monasteries' privileges did not stop with politics and money collecting, but also included control of the lands around them.

The colonial officials recognized the power of the monasteries - in the colonial forester's eyes the monasteries were clearly the enemy on account of their goats and their location in the hearts of the forests – but the foresters do not associate this power with control. Rather, they appear to view the monasteries as one of the worst examples of uncontrolled usage of the forests, and immediately work to limit their power. As shown in Chapter 5, the law came to the forester's aid in this process, since although the monasteries claimed rights over large areas of land, they often could not produce an official title deed supporting that right. The case of Makheras Monastery, which complains that the forest is being overgrazed because it could no longer control who was allowed to graze in it, is telling.

The government assumption that the forests were unregulated commons also affects individual villages as well as monasteries. As also indicated in Chapter 5, many of the villages either in or near the forests lost pieces of land during the delimitation as they could not produce title deeds to verify that they had rights over the land (if they even realized that the delimitation was occurring). The Forest Department, following their belief that a well stocked forest was better for the island as a whole than several vineyards or uncultivated grazing areas which were being used by people who were essentially squatters (in their minds), had no qualms in claiming those lands as State Forests. A key example is Livadhi, a forest village which later became associated with

some of the largest forest fires during the colonial period and eventually was removed from the forest. During the delimitation it stated that it had possession of a section of cultivatable land within the forest and even produced proof that it was paying property tax on the land, but the Forest Department nonetheless demarcated it as the State's own. The department's justification for claiming the land was that it was not needed by the villagers for cultivation, as they were all goatherds or woodcutters. One wonders how the history might have played out were the residents allowed to keep that land.

2. Further illustrating their lack of understanding of the Cypriot rural economy, the British assumed that shepherds and agriculturalists could not mix well, and they were determined to teach the Cypriot this fact as well, if the Cypriot did not already know it. Christodoulou (1959) succinctly highlights this issue, noting that Madon "placed his hopes on the agriculturalist turning against the shepherd" (110). Not only did they want the goatherds out of the forest, but they were also concerned with setting in place rules to keep them out of the agriculturalist's unfenced fields.

However, contrary to British assumptions, initially shepherds and agriculturalists worked together as indicated in Chapter 6, following a normal Mediterranean practice derived from "common law". There was a reciprocal agreement between the two, with the goats being allowed access to fields following the harvest to graze on the stubble and fertilize the land before they were driven into the forests or onto other uncultivated land for the remainder of the summer and fall. Many agriculturalists even owned their own flocks, or vice versa. The issue with this relationship, and its lack of support in the colonial mindset, not only centered on forest grazing but also on the British concern with intensifying agriculture. The traditional Cypriot agricultural system of one crop per year accompanied with multiple years of fallow was deemed inefficient, and it was considered that it needed to be replaced with one that involved no goats and limited fallow, if any.

As the years passed, the British assumptions regarding goats and the correct style of agriculture became more and more of a reality in some of the farmer's eyes until a much stronger tension arose between shepherds and farmers than had existed in the past. In many ways, the British views concerning goats and farmers turned into a self-fulfilling prophecy. It was actually the British policies themselves, both in terms of their anti-goat stance and their drive to delimit all land formerly used as common property as either private property or state owned, which appear to have caused increased tension and hostility between farmers and shepherds to raise over the years, creating new problems along the way. Thus, through an outward attempt to protect the environment while making it more efficient, in this instance the British instead disrupted the normal symbiosis between grazing and agriculture as well as deepened and/or created rifts in the society which were not fully present at the beginning.

3. The British also misunderstood the reasons behind many of the forest offenses, especially the fires on state delimited forest lands (i.e., forest and shrublands), as within their policy statements they continuously placed the blame for the offenses on the action of upset shepherds seeking revenge. While in less formal discussion, the British did allow that some fires were caused by natural events, or that some were accidental fires, or that some were set by shepherds to improve grazing grounds, rather than wreak revenge, these explanations almost always remained informal explanations. For example, the formal report sent to the UK following the 1924 fires stated that upset shepherds set the fires for political purposes. Although the Cypriot newspapers decried this interpretation, nonetheless, in the official setting, no further explanations were provided. This insistence on the role of vengeful shepherds in lighting fires had serious consequences, as it did not allow for a deeper understanding of the situation on the ground to be reached. The same is true for other forest offenses, such as unlawful possession or unlawful grazing,

although the colonial foresters never developed such a strong narrative about the motives behind them as they did for fires.

What were the full reasons behind the fires and the offenses? Were they strictly expressions of resistance to the colonial authorities and/or revenge? The historical record suggests otherwise, as it appears that offenses were carried out and the fires set often as part of an attempt to continue practicing their livelihood, as well as create employment. To explain it another way, if we view the British colonial rule as a chess game in which one can either learn how to play within the game, or one can try to attack the game from the outside (stealing pieces, knocking pieces off the board, etc), the Cypriot rural inhabitants were developing the means of livelihood by playing within the game, but not following the moves the British expected. The British policies had progressively taken away the traditional means of livelihood from these people; many of the foresters recognized this, even Unwin, who provided road work as well as his own proposal for relief projects during the 1930s depression. However, this work was hard labor, inconsistent, poor paying, and usually only available if the person had not already been in trouble with the Forest Department. Burning portions of the forest could serve multiple purposes, including the employment of a number of the villagers in processing the burnt timber, just as gathering wood illegally could also increase one's earnings. Although admittedly not all fires or offenses were set or carried out on the account of a need for work, at the same time one must not overlook the dire financial situation many of the mountain inhabitants were forced into by the British policies.

The consequences of this misunderstanding were especially felt during the depression of the 1930s as British efforts to curtail fires and other offenses only made them worse[1]. The common forms of punishment – taking away grazing permits, woodcutting permits,

[1] Some of these offenses may reflect a desire to cause damage to Unwin's Forest Department out of spite, but the offense numbers climb to almost as high of numbers during another period of financial stringency in WWII, implying that it is not just dislike of Unwin guiding this.

the ability to bid for government jobs and becoming stricter about applying the forest laws to their fullest extent – all were guaranteed to backfire if the reason the offenses were initially committed was out of desperation to sustain their livelihood. The only option left to the native Cypriot in that situation, provided that s/he could not migrate to find work elsewhere, would be to repeatedly break the law over and over again. Further, once a punishment such as taking away a grazing permit had been delivered, what would be the incentive not to continue to graze one's animals in the forest? The worst possible scenario would have been jail and/or confiscation of the flock. Jail would provide food and shelter, and therefore, while still undesirable to the resident, it likely would not be that undesirable depending on one's state of poverty. Confiscation of the flock was a more serious concern, but also not necessarily a full deterrent. What use was a flock if they were dying of starvation on account of the lack of legal grazing areas? If the options were either to watch them starve or risk prosecution, one could assume that prosecution would be chosen. Further, as noted in earlier chapters, at least 50 percent of the shepherds did not own their own flocks by the 1930s, and thefore confiscation of the flock could not be enforced for these shepherds. In general, one could liken the offenses' situation to adding water to an oil fire; the actions to try to stop the offenses only made matters worse, and going into the 1930s the number of offenses had reached over 9000 per year.

The turning point in this crisis occurred as the colony was going into WWII. As with other countries in the Mediterranean, there was increased rural to urban migration between and following the wars thanks to industrialization and new jobs in the tertiary sector, among other reasons[2]. There was a relapse in offenses during the end years of WWII when the available fuelwood had become so scarce that Cyprus was forced to institute a mandatory shift to fuel oil for many purposes, but this relapse was short-lived

[2] For example, the capital city, Nicosia, saw a 46 % population increase between 1931 and 1946 (see the Cyprus Census 1931, 1946, see also Attalides 1981).

and disappeared as the inhabitants continued to flood into the cities. Thus, the decreases in offenses were not linked to the internal Forest Department punishment schemes, but rather to external events. In fact, it appears likely that the end result of the British attempts at halting offenses by taking away privileges may have often increased the number of offenses rather than decreased them. This is not to downplay the role played by the personalities and management styles of the various forest officers, but rather to emphasize that not every offense should be viewed as strictly politically motivated resistance.

4. Linking with the above discussion of offenses, the British assumed that their education and propaganda campaigns had created a forest conscience among all Cypriots, and it was on account of those campaigns that they were able to remove the goats from the forest and allow the forest to "recover" from prior "degradation". They believed that this way of thinking had penetrated the typical Cypriot inhabitant living in or near the forest areas. It had not. However, they did reach the typical Cypriot urban inhabitant as time continued, and the Cypriot elite seemed to share the British mentality from the earliest years of occupation, perhaps on account of their experiences abroad.

To understand why the British efforts reached some, but not others, one first must understand the definition of a "forest conscience" the British developed over their years on the island. Namely, the indirect benefits of water, air, recreation, "forest influences" progressively came to be viewed as the most important contributions of a forest. The forest was a place of relaxation, untouched by humans, a place necessary for recreation, retreats. There was no place in the forest for people living a life which actually utilized the forest products[3]. A forest must be allowed to grow unheeded, only specific

[3] Although now this belief is changing, as it is acceptable provided that they are classified as traditional and preferably included in an ecotourism scheme.

government fellings may be carried out, and these are carried out for the health of the forest. This, then, was a “forest conscience”. The catch in this view of forests, of course, is that it is a middle to upper class view, and one which was developed in a humid and temperate biome. Forests can only be utilized in this manner if the population does not need to actually live off of the forests. The native people who appear to have found sustainable ways to live off of the produce of the forest for centuries[4], did not fit into this picture, and therefore they must find another place and another manner of living (hence the suggestions since the 1890s for the removal of forest villages).

As might be expected, for the Cypriots living within the forests who had been forced to give up their goats, this education appeared to have little effect. The goat was not a bad animal, and the forest could be used for more than just weekend jaunts. They might have moved out of the forest and taken up other jobs, but they did so because they were forced to do so, not because the propaganda approach had been successful[5]. Immediate attempts post 1960 to convince the Forest Department to re-admit goats into the forest provides a good example to enforce this statement, and further examples will be seen within the epilogue.

5. Finally, and most importantly, the British mistook for degradation what was in fact the average appearance of the Cypriot forest and wood lands and this in turn informed many of the other misunderstandings above. The Cypriot forests, especially those of the Southern Range with their predominately old and widely spaced pine trees, intermingled with oak and arbutus, were not productive forests in the early forester’s minds, and they assumed that the inhabitants were to blame for it within this view. Further, they posited that goats were especially “evil” – not only did the shepherds set fires to improve their

[4] This is not to imply that the native inhabitants were always ecological angels, as they likely were not.
[5] Chapman (1946), one of the British foresters, appears to recognize as much.

grazing, but they also consumed all of the new seedlings, accounting for the lack of young trees the early British foresters noted (Madon 1930 [1880, 1881], Troup 1930; Hutchins 1909 blamed fires which were set for goats). As this cause and effect scenario goes, if the goats were removed, regeneration would occur, and through proper management and working plans foresters would be able to create a fully stocked, economically productive forest[6].

However, while it is true that the shepherds would set fires, and the goats would eat some seedlings and undergrowth, these factors were not fully responsible for the stocking rates of the forest. Even after 60 years of effort, including the removal of the goats, in the mid 1940s only 20 percent of the forests were considered to be fully stocked[7]. Some might suggest that the forests had not had time yet to recover from the goats, the majority of which were removed in buy-out schemes in the late 1930s and early 1940s. However, in both 1950 (according to the Conservator of Forests, Waterer) and 1961 (according to the Director of Forests, Polycarpou) only around 100 square miles of the 533 square miles of State Forest land were viewed as fully productive, or just under 20 percent of the total forest area.[8] Efforts to profitably exploit the forests in the 1960 to 1980s were not successful, and today efforts have ceased altogether - no commercial extraction occurs in the state forests and fellings are conducted only as sylviculturally needed. Turning specifically to goats, as noted in Chapter 6, studies have shown that there has been no uniform behavior to restocking following the cessation of grazing in Cyprus.

In sum, as argued in Chapter 3, the main Cypriot forests are resilient and have not been dramatically altered over at least the last several centuries. The scene which greeted

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[6] Although as noted in Chapter 4 and Appendix IV there was initially a triumvirate of evils – fitful cultivation, fires, and grazing - fitful cultivation lost its status following the delimitation, although it would still appear from time to time, and fires became firmly attached to grazing, as discussed above.

[7] It is uncertain how WWII cuttings factor into the stocking rates, as Unwin pre-WWII had also suggested that the forests were only 20% fully stocked.

[8] One could question the accuracy of the numbers and whether the foresters were not just repeating the same data over and over, but unfortunately data does not exist with which to confirm the figures.

the first British forestry officials was likely not much different than that which greets the modern traveler today. If anything, on account of the WWI and WWII fellings, the political events of the latter 1950s and 1974, and the introduction of large, motorized machinery for felling and terrace making purposes, the landscape today may actually look more degraded than in 1878[9].

The British searched for, and supposedly found in the goats and the inhabitants, causes of degradation in a landscape which likely was not degraded. The bemoaned 20% stocking rate of the forests has remained constant throughout the decades and appears to be the natural state of the forests; it is the scale of density that is applied to the forests, rather than the forests themselves, which is in need of fixing. In this light, any management policies which start with an assumption that the forests can be made more profitable by intensive stocking and felling procedures were and are bound to fail.

FURTHER POINTS OF INSIGHT INTO THE COLONIAL EXPERIENCE

The overview of misunderstandings above has illustrated that for Cyprus the colonial environmental experience was misguided in many ways. By starting from inaccurate assumptions and continuing to expand upon these over the years, the British colonial efforts did not equal a grand forestry success story as Thirgood (1987) would have the reader believe. This does not imply, however, that the experience of the British foresters and officials and the Cypriots cannot also be used to help further explicate some of the basic aspects of the colonial experience. Specifically,

1. Within the context of the imperial experience, how were policies formed?

[9] See Rackham and Moody (1996) for a discussion of the effects of modern equipment on Crete.

Environmental historians have emphasized the need to understand how the colonial state actually functioned on the ground. In Cyprus, this procedure took the form of an individualistic process of multiple competing claims. The colonial state was certainly not a monolithic ruler, exerting such control over all of its possessions and employees that they followed the exact same strategies. Rather, individual personalities and beliefs, both of the colonial officials and of the Cypriots themselves, were the deciding factors in how particular policies were created and applied. As specific examples of this situation on Cyprus, the reader could turn to the disagreements between Madon and Biddulph and Kimberley, the reasons behind the introduction and passing of the 1889 Forest Law, and the large effect of Unwin's personality, to name just a few.

2. How does one interpret resistance in the colonial context?

Scott's (1985) "weapons of the weak" and the recognition that everyday types of activity (or lack thereof) can be utilized by those being ruled to gain power over their rulers helped alter how resistance had been traditionally defined. No longer was resistance merely the domain of revolutionaries or loud demonstrations – resistance could be just as easily expressed in small acts of noncompliance, perhaps unnoticed by many of those who saw it.

However, within this general context, care must be taken to prevent "resistance" from becoming an unquestioned assumption, automatically utilized as the reason behind all actions, and thereby preventing a fuller investigation of the issue. Resistance cannot and should not be ignored, but the underlying beliefs which go hand in hand with the word "Resistance" must also be examined. The questions of resistance to whom or what? why or how? must always be asked, so that in the process of interpreting the subaltern's actions, one does not assign a false history to them, taking away their identity and power just as surely as the colonial histories themselves did. Similarly, one must be always

aware that there can be multiple reasons behind one action, and resistance may be only one of those reasons.

Further, one must be careful to not envision resistance as just flowing in one direction from the stereotypical powerless native to the stereotypical powerful colonial official. Many of the judges serving on the Courts in Cyprus either threw out or provided very lenient sentences for a large number of cases brought before them by the Forest Department. Would the actions of the Courts, manned by colonial officials, be viewed as a form of colonial resistance against the Forest Department, also manned by colonial officials? If so, how does that fit into the stereotypical presentation of colonial rule as being a homogenous blight on the landscape, preventing the subalterns from having a voice? In terms of the subalterns, does it even matter that much? The actions of the court do benefit them, but is that why the Courts are behaving as they do?

As another example, the Cypriot Legislative Council members complain bitterly about the policies of the Forest Department. Can we label this yet another example of the resistance of the colonized to the colonizers, pat ourselves on the back for giving the natives a voice, and move on? Yes, we can, as on one level it is resistance, but we will not learn much in the process. The same can be said for forest offenses and fires – they can be conceptualized as forms of resistance, but just calling them that does little to explain them. In sum, with any of these examples, quickly slapping an explanation of "resistance" on them would do little to help us understand the actual historical events. Rather, in-depth, small-scale research must be undertaken.

3. Is it acceptable to interpret colonial forestry policies by applying an empire-wide definition of colonial forestry?

Grove (1995), Drayton (2000), Anker (2001), Rajan (2006) and many others have attempted to define the role that the colonial experience had in the creation of

environmentalist thinking, while at the same time defining a common empire-wide view of forestry as part of their arguments. Was the colonial empire, with its centralized forestry education training system and custom of sending foresters as experts from one colony to the next, actually interconnected and powerful enough to ensure that an empire-wide forest approach was followed in all colonies?

On a broad scale, one can see an empire-wide view emerging in the literature on Cyprus. This outlook can be loosely described as a multiple use forest management scheme; this management, usually involving selective felling, would allow the forests to support themselves while at the same time the colony could still benefit from its indirect benefits. Circulars sent to all colonies espoused a similar view, and positive and negative examples of the effects of forestry in various countries were often cited.

However, when viewed from the smaller scale level of the actual events on the ground in Cyprus, the implementation of that common view and the motivations behind it largely depended upon the individual applying it, as with policy making and resistance. For example, Unwin, Waterer, and Chapman all made similar statements about the importance of forests, these statements closely meshed with those espoused by the empire as a whole, and indeed, these foresters themselves were active in the larger body of colonial foresters, but their actions were quite different from each other. If one attempted to utilize solely the commonly defined “empire-wide” view of forestry to interpret the actions of foresters and the events in Cyprus, one would therefore likely produce a flawed history.

In sum, as also argued above, a small-scale, essentially individual approach is necessary for fully understanding events in British colonies. On account of the level of interconnectivity between environmental scientists within the British Empire, it is tempting to imagine that the environmental outcomes in the various colonies can be explained by assuming that each colony had been subjected to the same forestry policies

as in other colonies. Similarly, it is tempting to assume that the effect of applying a policy in one colony could be duplicated by applying the same policy in another colony. Unfortunately, this is simply not the case.

Epilogue

As argued in the previous chapters, the accepted environmental history of Cyprus appears to be a socially constructed narrative with little factual support. Nonetheless, it is almost universally accepted both by the Cypriots themselves as well as foreign experts, such as Thirgood (1981, 1987). While correcting an historical inaccuracy is an admirable task, one might still question whether expending the time necessary to revise and reinterpret this widely popular narrative is the best use of one's time and resources. What would be the goal of revising this history? Most everyone today would agree that the ability to define history can be used for substantial power, and that recreating a more contextualized history can provide power for the weak and the past victims. But is an inaccurate history such an issue on Cyprus, where there are no images such as that of tribal societies being forced to sedentarize as might be seen in other parts of the world? Nor are there many images of villagers joining together to fight the government or large corporations from deforesting a natural landscape which they depended upon for their livelihood.

Far different from many of the depictions of indigenous people presented by postcolonial (and post-development) studies, for the majority of Cypriots, the indirect benefits of forests far outweigh any direct benefits the forests might provide. They state that they believe that the government should be in charge of it to protect it for future generations. The Cypriots display the environmental tendencies which are typically praised by utilizing this history – they overwhelmingly express a love for nature and a willingness to fund and protect nature for nature's sake (see Michaelidou 2002).

In this context, what difference would a revised history actually make? Is it really wise to question it? Has this research simply been another example of a western scholar, swept

up by postmodernism and postcolonialism, becoming over-exuberant and questioning all established narratives without fully understanding whether it is a worthwhile endeavor (see Blaikie 2001:143-145)? Why doddle so much in this past period, when the majority of the inhabitants see no obvious harm from those actions today? The past is the past; it is time to think of the present and the future.

However, it is precisely because of the present and the future that this questioning is necessary. Since the British policies are understood to have been successful policies, the island continued to follow the same policy statement; the 1950 Forest Policy served as the island's forest policy for over half of a century. It was rewritten during the past decade with the assistance of the FAO, but the differences (increased community involvement and the cessation of fellings apart from those necessary for ecosystem health) are more a question of alteration than revolution. I say this because the changes are not unexpected nor are they necessarily new. Similar ideas were already discussed and encouraged at various times within the colonial period. For example, Waterer in the 1930s and 1940s was highly concerned that the people understood that the forest was the "People's Forest", while the enquiry into Unwin's policies in the 1930s demanded the cessation of commercial fellings, and the current department had been following a similar strategy even before the policy was revised. Further, Archival files support the assertions of authors such as Thirgood that the colonial forestry officials deserve accolades for being "forward thinking" with their concerns for multiple use forestry and social forestry. Some of Madon's letters and publications from the early 1880s would likely find support with environmentalists today.

What does this practically mean for today? That the accepted narrative of the past, the unfounded socially constructed narrative that might have done more harm than good in certain aspects, is actively influencing environmental policy today. Further, that many of the environmental management strategies suggested today have already been introduced

and discussed, and, for some of them, even implemented with varying success in the past on the island. In this context, the importance of accurately placing the correct past effects with the correct causes becomes much clearer – not only did inherent misunderstandings disrupt the past, but they also may disrupt the future. A return to Nea Dhimmata, the village discussed in the Prologue, combined with a discussion of the modern rural development plans in the nearby area of Akamas, can help to situate the necessity of the revised narrative.

RETURN TO NEA DHIMMATA

Nea Dhimmata today shows the signs of time. The majority of the remaining residents are older individuals. Their children left long ago, on account of the lack of planning within the original design for the expansion of the village to fully accommodate a growing population. Many of the original buildings still remain, as the government has declared them to be historic structures and thus governed by additional rules concerning their maintenance. However, the residents view this action as a further abandonment by the government, complaining that the government does not give them enough funding to maintain their houses. Their current hope is that an attempt to turn the old school house into a cultural center will increase knowledge of the village and thereby increase its standing and the money which it receives.

In contrast to the Forest Department's views and hopes for the village, things almost immediately did not proceed as planned post 1951. The initial plans had the residents repaying through loans part of the cost of construction. Their debt was absolved in 1953 – the government realized that the inhabitants simply could not pay it off following several poor harvests. The sub-par harvests were not totally unexpected, however. The government had used smaller and lower quality pipes to transport water to the village on

account of supply and cost issues, and the figures for yields were drawn up prior to the switch. Further, the inhabitants never fully developed a communal farming system, as had been the initial hope, and the communal lands were eventually divided among the residents. One might suggest that the experiment had failed.

Intriguingly, however, despite the residents' modern complaints about the treatment of their village by the government, the original generation of inhabitants will state without hesitation that life is much better in the village than it would have been had they stayed in the forest. They speak positively of the better quality of housing, and more generally, the life they have had since moving to the village. Should one therefore assume that even though the agricultural experiment failed to make the money that was expected, nonetheless the experiment in general still was a successful one? In other words, that in the case of these shepherds, the British did indeed succeed in convincing them that an agricultural lifestyle was better?

The answer is a definitive "no". Upon further questioning, it became apparent that while the inhabitants were confident that their lives were better within the new village, agriculture was not a key aspect of this happiness. In contrast, Limni Mine, which is situated just down the coast and opened in 1951, was. Many of the Nea Dhimmata inhabitants had managed to find jobs in this mine, which remained open into the 1980s, and these jobs provided them with a steady income. They might have planted some crops on the side, but their primary work was in the mines.

One might still try to argue that that the British were at least successful in convincing shepherds that goatherding was not an acceptable occupation as reflected in the fact that they requested to leave the forests themselves. Perhaps I have been overly hasty in stating that the Forest Department's education had been ineffectual? However, upon further searching, this does not seem to be the case. As mentioned previously, the British do appear to have succeeded in convincing the shepherds that they could not remain

shepherds, but they did not convince them of any reason behind this other than that it was something that they must do. In other words, the inhabitants of Nea Dhimmata did not gradually develop a "forest conscience", and thanks to it realize that their goats were causing harm to the forests and that maintaining the forests for all Cypriots was more important than maintaining their shepherding lifestyle, and therefore request to be moved to a different location. Quite the contrary – they, as well as others (see Michaelidou 2002) still hold that goat grazing is not harmful to the forest when practiced properly. Instead, they left simply because the British had made it too difficult for them to stay. One informant for whom a prison sentence was necessary to finally convince him to give up goatherding expressed the situation in this defeatist manner. "What was [he] to do?" The British were telling him that he had to get rid of his goats and he held out as long as he could, but after being placed in prison and having his flock sold, he had no other options.

WIDENING THE VIEW

In bringing Nea Dhimmata into the present, it is also essential to widen the lens a bit to fully grasp the current situation. The village today sits just outside of an area receiving aid through EU funds earmarked for rural development. While the inhabitants of Nea Dhimmata discuss the difficulties of maintaining their homes, villages down the coast are receiving funds for building new museums, churches and cultural centers, most of which have the dual goal of increasing ecotourism in the area and encouraging residents to remain living within the rural villages. During a visit in the summer of 2006, the construction paid for by the funds was quite evident, but the tourists were not. One new museum was closed, and I was told that it was almost always closed, while in talking to the employee of another it became clear that for now at least, these ventures were only staying afloat because of the continuing subsidies coming out of the rural development

program. Furthermore, the employee, who was supposed to be encouraged to stay within the village thanks to the employment that the museum provided, spoke of the necessity to leave the village and move to a bigger city. The museum job simply did not pay enough to support a family, and, despite the new development initiatives, the children still did not have the same access to after-school tutors as those in a larger city.

These villages appear to be the latest irony in this history of failed social experiments. The prevailing ideas of today argue for community development and ecotourism, and multinational bodies present themselves as benevolent, charitable, and environmentally friendly bodies by funding such projects. Nea Dhimmata came about the same way – the prevailing ideas of that time argued for communal agricultural settings, and the Colonial Development and Welfare grants (not multinational, granted, but with similar goals of promoting development) provided much of the funding. In this new period, however, Nea Dhimmata, the relic of the previous failed attempt, is shoved aside to make room for the newest efforts, which are presented as a picture of community environmental governance of the sort that Agrawal (2005) would likely approve.

However, these ecotourism-guided development strategies are just one part of the rural development plans taking place in the area. Many of these villagers also own property outside of the villages proper and within areas near the Akamas forest. These lands are rich in biodiversity, and the government has plans to include them in *Natura 2000*, an EU funded program which aims to preserve areas of biodiversity throughout the EU. The rules of *Natura 2000* do not state that property owners cannot use lands which have been included within the area, but they do say that they cannot be used in any other manner than the current use which has protected and produced its biodiversity. One might assume that the residents would accept this plan; after all, they do generally care about their environment, and they are themselves rural inhabitants. Surely they would want to preserve the natural beauty surrounding them.

As throughout the Cypriot history, the Cypriots have rarely swayed from expressing their opinions. These communities are no different; they are expressing their opinion concerning the rural development plans for their property quite loudly. What is that opinion? Is it concern that a government minister built and expanded a posh hotel along the coast several decades ago on land which was to have been at least partially protected in a proposed environmental reserve? Is it concern that the government, as seen in the above example, is not showing enough concern for preserving the biodiverse ecological setting of the area[1]?

The residents' opinion approves neither of those options, but rather it is one of outrage that the government has plans to include their land within *Natura 2000*. These residents, whose very villages are being converted into potential ecotourism destinations, want the opportunity to develop their lands outside the village for profit as well. Inclusion in *Natura 2000* practically means that they will not be able to do so – they will not be able to capitalize on the coastal tourism market in Cyprus, as that government minister did several decades ago.

What has happened here? Despite the British education and propaganda, the Governor's photo-ops planting trees on Arbor Day, the poems in the Forest Department's *Forest Treasures* magazine extolling the virtues of trees and nature, even the claims of Cypriots today that they treasure their local environment, just as the Nea Dhimmata inhabitants did not become gentlemen farmers, these traditionally rural villagers have not become tree-hugging environmentalists as their city cousins purport to have become. They want the freedom to develop their biodiversity-rich properties as they see fit, rather than preserve them for the good of the rest of the island or for future generations. They

[1] Although outside the scope of this discussion, the history of how and when this land has come to be viewed as valuable, as opposed to nonproductive waste land, is a good example of how ideas regarding "good" and "bad" landscapes, or "degradation" versus "biodiversity" change over time.
See Welz (2006) for a summary of the Akamas history. In general, the Akamas has attracted a fair amount of environmental activist literature, but academic publications are more sparse.

feel so strongly about this that they have threatened over the last several years to burn down the forests if their properties are included within *Natura 2000*. A series of forest fires, attributed to arson by the Forest Department, did indeed follow a recent report on the *Natura 2000* progress which showed their properties as being included (*Cyprus Mail* May 8, 9, 10, 11 of 2007). How can this behavior be explained?

GUHA'S FALLACY OF THE ROMANTIC ENVIRONMENTALIST

Broadening the discussion yet again, a large literature exists on the actions of people living in and near the forests in India to protect their rights to the landscape. Their long history of struggle against the development minded government (whether colonial or postcolonial) has served as creative fodder for a number of authors discussing topics ranging from state formation, to development, to varieties of environmentalism, to a sustainable future. Despite obvious differences in size, location and climate, thanks to the interchange of ideas as well as the colonial foresters themselves, the Cypriot experience concerning forests shares many similarities with the Indian experience. Yet on Cyprus, the rural villagers, who in this comparison would be equivalent to rural Indians such as the women of the famed Chipko movement, are not leading protests against government fellings but instead are so upset that the government wants to preserve their land that they are willing to light forest fires. Again, how can we explain this behavior?

As a tentative search for a solution, one is reminded of Bryant's (2006) and Herzfeld's (1987) concerns with illustrating that Cyprus has always considered itself to be part of the West. Postcolonial studies of the island run into trouble, since the island considers itself to be always part of that which the "post" in postcolonial studies would have it look beyond. The island desires to be viewed as a modern, western nation, but at the same time it argues that it has always been westernized. In this context, the peasants who

fought to maintain their traditional land use through petitions and a sliding scale of resistance aimed at developing ways to work within the system are now well on their way, if not already at their destination, of working within the system again, this time with a goal of becoming prime examples of first world citizens, as they view is their historical right.

First world citizens follow western ideas of environmentalism, ideas which often include the argument that economic growth and environmentalism can go hand in hand by setting aside wilderness preserves for future generations while focusing on development in other areas. These ideas are not new to Cyprus; the British themselves started teaching these ideas on Cyprus as part of their "forest conscience", and as in the past, these ideas only makes sense to individuals who do not need to live off of the land. Thanks to the successful drive for modernization and westernization of the Cypriots, as well as the modern development programs within their villages, these villagers no longer have to live off of the land.

To put it another way, borrowing Guha's (1997) terms, the "ecosystem people" want to be "omnivores". Modern environmental thinking rests on the idea that the way to preserve the environment is to encourage rural people to remain within it and practice traditional handicrafts, conceptualized as being sustainable activities which allow the environment to maintain its natural state. This assumes that the rural people want to remain rural. Quite often, they do not. Modernization and globalization have reared their heads, and these people want to have the same benefits as they see others have in either more developed areas of their own country, or more developed countries than their own have. These rural Cypriot villagers are no different in this aspect, especially since the modernized world to which they have become so fully attached is repeatedly telling them that development, now being embodied in its golden child of tourism on Cyprus, is the

way to maintain and improve their omnivore status. Why should they suffer, when their fellow citizens are profiting?

McCarthy (2005) puts forward an impassioned plea for the recognition and need of a First World political ecology, noting that political ecology today is so wedded with the Third World and its history of colonialism, decolonization and postcolonialism that it risks becoming too complacent and not fully questioning its own assumptions, including its potential in this setting for having its own orientalist tendencies. For McCarthy, a political ecology approach to the First World would help expose these assumptions while furthering our understanding of the complexities inherent in the human role within the environment.

I do not wish to specify that an approach labeled as political ecology is any better than one bearing a different label. At the same time, however, McCarthy's general point that often our ways of viewing the environment, especially a postcolonial environment, are constrained by unstated assumptions deserves merit. This certainly is the case on Cyprus, where Nea Dhimmata and the current Akamas development plans both suffer(ed) from the same problem, namely an assumption that the rural inhabitants want(ed) to become something which they do(did) not. Further, both cases illustrate that one cannot rely on the typical styles of environmental education (tree planting, walks in nature preserves, etc.) to convince these inhabitants otherwise[2]. It is simply impossible on Cyprus to neatly

[2] Marx (1972) provides the following insight into environmental protection attempts of the 1970s, an insight which is still worth considering today: "…scientists would do well to contemplate the example of these recent protest movements. They would be compelled to recognize, for one thing, that, while public awareness may be indispensable for effecting changes in national policy, it hardly guarantees results. In retrospect, indeed, the whole tenor of the civil rights and antiwar campaigns now seems much too optimistic. Neither program took sufficient account of the deeply entrenched, institutionalized character of the collective behavior it aimed to change. If leaders of the campaign to save the environment were to make the same kind of error, it would not be surprising. A certain innocent trust in the efficacy of words, propaganda, and rational persuasion always has characterized the conservation movement in this country" (95).

fit its complex history into a pre-defined outline of colonial and postcolonial environmental development.

Further, my assumption is that the Cyprus situation is not all that more complex than many other geographical settings. If this is so, a full understanding of the past, much more nuanced than that which is often produced, and consequently a better idea of what are potentially good options for the future, will only come about if we allow for this complexity and continuously seek it. Simplified environmental history accounts that depict good and bad characters may make for interesting reading and appeal to many different types of people, but if the end goal is to actually understand our environment, these accounts can only serve to damage our efforts.

Appendix I: Timeline of Main Events concerning Cypriot Forests between 1878-1960

The Early Years: 1878-1885

- By Nov. 1878 contract already signed to plant *Eucalyptus globulus* seeds from Tanzania around Nicosia and Larnaca, Government gardener obtained seeds from 15 different eucalyptus species and planted them around Famagusta as well as distributed some to public; majority of plants died during the harsh winter

- Requested Forest Official from Indian Forest Service
  Wild, 3 months during winter of 1878-1879

- Dept of Forests formed in 1879, second after Dept. of Land Registration and Survey

- First legislation – Several Orders in Council and The Woods and Forests Ordinance, Law No. 22 of 1879
  Early legislation indirectly responsible for one of the first major incidents of negative press (imprisonment of priests and shaving their beards and hair)

- Madon, Spring 1880 – Fall 1882
  French, training in Algeria and in the Region de Feu in France

  Preservation of existing forests over re-afforestation, questioned the usefulness of Eucalyptus planting

  Fires not malevolent

  Importance of delimiting forest area

- Woods and Forests Delimitation Ordinance, Law 8 of 1881
  Government not initially supportive as they saw no immediate profit arising to offset the cost of the delimitation work

  Commissioner of Nicosia files complaint that people are being brought into court on charges under the law before it has even been translated and circulated throughout the population

  Courts often side with the natives over the Forest Department, this will become a common occurrence

- Dobbs, who previously had been part of the the Indian Forest Service becomes PFO on August 25, 1882, and stays until 1885

- 1882 Immediate issues with Delimitation process

- 1883 Chief Secretary (Warren) wants to increase goat tax, decrease sheep tax
  High Commissioner (Biddulph) not supportive of this, nor is the Finance Department

  Concerns are the loss of revenue, loss of popular approval

- 1884 Dobbs suggests placing forests under District Commissioners

- 1884-1885 Repeated attempts to limit number of trees felled on Troodos as well as grazing

  Dobbs wants to create a system of alternating forest reserves, closed to pasturage for at least 10 to 15 years

  High Commissioner not fully supportive, concerned that will upset population too much and that Legislative Council will not agree

  High Commissioner further upset that Dobbs issues permits for over 287 trees to military and British officials in those very areas that he states are so degraded that they need to be reserved

- 1884 Chief Secretary (Warren) prepares a report on the first 7 years of colonial rule

  Admits that none of the officials knew the laws, languages, or customs when they came – completely new territory

  Also urges more legislation against goats:
"It seems to be a war between these creatures and civilized man, and as the goat at present has the law on his side, it would appear probable that unless a change in this law is made the matter will end by the victory of the goat, and proof that under the proper protection of the law as administered by a progressive and free nation an animal not carnivorous has a fitter right to survive than domesticated and obedient man."

- August 1885 Report by the High Commissioner on Forest Conservancy on Cyprus
  Forests are a necessity for water, they are being inefficiently used, and much damage is done by goats

Need to develop reserves, free from grazing, which would benefit whole community

- Bishop of Kitium immediately complains, as he does not think the poorer communities or the monasteries will be able to support themselves if they close the forests

- 1885 Commissioner of Kyrenia tries multiple times to get a fee introduced for licenses to graze goats in forest
  Also suggests that the Government import a test load of wood from Turkey in order to encourage the Cypriots to rely upon imported, not local, wood, Government declines for monetary reasons

- 1885 Dobbs departs, but not before he obtains permission to create his desired reserves, and successfully transfers the Forest Department to the District Commissioners (26 June)

- 1885 Field Watchman Law passed; multiple subsequent revisions, including two fairly quickly in 1891 and 1896, issues center on who elects the Field Watchman and how he is paid

- December 1885 Commissioner Kyrenia still unsuccessfully arguing for charging a fee for allowing pasturing in delimited forests
  Ironically, opposed by the PFO (General Grant, also Director of Survey) and Warren (the Chief Secretary who wants to increase the goat tax)

Control of forests under PFO and District Commissioners, 1885-1895

- Multiple Principal Forest Officers, none with forest training, they also serve as the Director of Survey as well as sometimes other positions; lower forest staff under the immediate control of the district commissioners
  As example, during one year the same man (Young) served as the PFO, the Director of Survey, the Acting Colonial Secretary, and the Acting Queen's Advocate

- Continuation of Delimitation and consequent complaints (interpretation of Ottoman Land Code, validity of title deeds, and rights associated with the payment of verghi are questioned)

- 1887 – Military no longer allowed to use Island wood for firewood

- Complaints about Forest Department organization
  Commissioner of Famagusta argues that it is best to have full control of the department staff and proceedings in his district or none at all

High Commissioner (Bulwer, replaced Biddulph March 1886) wants a separate Forest Department as before, reminds the officials that Cyprus is not India, and therefore should not be treated as such

PFO (Law) – We do not have the funds or staff to manage the department on our own, it must remain under the district commissioners control; High Commissioner acquiesces

- The Goats Law 1888 – prohibits their import without special permission, and allows for the tax on goats to be raised. Still difficulties in doing so, though, on account of the concerns of the Treasury Office

- The Forest Law 1889, Law 12 "For the Better Preservation of Forests, Trees and Plantations"

  Shifts burden of proof on to the person with the wood, i.e. guilty until proven innocent, also includes the option to place private forests under government protection

  Introduced by a Cypriot member of the Legislative Council. Government had wanted to pass such a law for several years, but had hesitated out of concern that it would too greatly upset the Legislative Council and the general population. Its introduction by a Legislative Council member himself removed these fears.

- Delimitation mainly finished in 1892, although several more areas delimited post 1892, including in regions which had already gone through the delimitation process once before

Bovill Period, 1896-1921

- Separate Forest Department reconstituted under the control of A. K. Bovill
  Had served as a clerk in the Land Registry Office, also served as the acting PFO for multiple periods between 1885-1896

  Lack of forestry training, but good family connections (uncle was the Chief Justice)

- In general, lack of funds; government, especially courts, still often unsupportive; and continued complaints by people regarding delimitation

Bovill Period: 1896-1904, Specific Events

- Complaints about felling wood on private property increasing – private citizens upset that have to get certificate from Forest Officer to fell wood on their own property. Certificate necessary because of the Forest Law of 1889, but the Forest Officers could take weeks, if not months, to find time to issue them. PFO states

that should proceed more quickly now because of better staff, but also makes it clear that some delays may be necessary because Forest Department concerns take precedence over the concerns of private citizens. The basic issue of how to deal with wood on private property continues to be an issue through the 1930s.

- Legislative Council unhappy with the forestry situation

  Stymied attempts to create new laws – for example, in 1899 and 1900 government attempted to create Village Fuel Grounds, and Legislative Council argued that the inhabitants need immediate relief via increased permits to obtain fuel wood more than they need fuel grounds which will not produce for years

  Utilized their reply to the annual Opening Address of the Legislative Council by the High Commissionerto make their anti- Forest Department views known

- Legislative Council Statement in 1900:
  "Another source of scandal and arbitrary acts is the Forest Department… the Council observe that the department in question … adopts measures which have not for their aim the preservation and extension of the forests but only the oppression of the Agricultural class...." They further refer to the crowd taken to court for gathering timber and fuel from hali places (waste land), noting that it is true that most cases are thrown out, but that is not before costing £1 per person in court fees. They consider this to be "unlawful and injurious zeal", urge the Government "to remove the Draconic restrictions which hinder the development of cattle grazing by granting licenses to the villagers to graze their animals in neighbouring forests...."

- 1901, Law No. 9, Village Fuel Plantation Law finally passed, although not implemented for another four decades (called for mandatory voluntary village work in plantation as well as for the plantation to be situated on current grazing ground). Lack of success with it led Bovill to focus on increasing the department's forest plantations, first begun under Madon.

- Legislative Council statement in 1902 further emphasizes complaint with government:
  "… by all calculation, tree planting promises a radical improvement of the Island. Climatological improvement, wealth-giving developments and an embellishment of the Island will be the result thereof...."
  "But with respect to the Forest Department the Council regrets to observe that the said Department has forgotten its object and has become a source of just complaints...." The council considers the Government to be guilty of deliberate obstruction and the villagers consider the Forest Officials to be "mischievous elements". The Council wants to not only preserve but also re-afforest, so it regrets that the Forest Department has paid no attention to the question of

reafforestation and has “sought to preserve the forests through great excesses and unlawful oppressions.”

Bovill Period: 1904-1914, Increased Attention

- King-Harman becomes High Commissioner in 1904
  Noted for being sympathetic to the local people. (He had served on the island previously as District Commissioner.)

  Promises to look into the grazing of sheep and goats, the re-afforestation of the mountains, the creation of fuel grounds, and the utilization of the existing timber supply

  Results in 1906 – Further areas of forest opened for grazing, fee for grazing large animals in the forests removed

- Legislative Council complaints in 1906 that not enough re-afforestation

- Churchill visits Cyprus in 1907
  King-Harman’s statement following Churchill’s visit:
  “The deplorable condition of the Cyprus forests and the inability hitherto of the Island Government to do more than preserve as far as may be possible the remnant which has not been destroyed, have been so frequently brought to the notice of His Majesty’s Government that no argument of mine is needed to support the proposed appropriation of £5000 for afforestation purposes. The time has at last come when the Island Government, after 30 years of enforced inactivity, is placed in a position to undertake a work which perhaps more than any other is calculated to restore Cyprus to the height of her Medieval prosperity, and I apprehend with confidence that His Majesty’s Government will share the satisfaction with which the local Government contemplates the opportunity now offered.”

- Churchill’s visit results in increased funds; fixed grant-in-aid for the Tribute of £50,000 (1910-1911, £40,000)

- Hutchins, the Chief Conservator of Forests in Cape Colony and British East Africa, visits Cyprus in 1909, writes book

  Censoring of Book – Hutchins criticized the lack of resources provided for forests in the previous year, and also suggested the creation of a £500 Goat Fund which could be used to gradually buy the goats out. The local government thought that would rile public opinion too much, and subsequently tried to remove it before the Cypriots could see a copy. Ultimately unsuccessful in attempts.

- Goats Law of 1913 – with majority vote villagers could ballot to keep all goats out of village boundaries
  Officer Commanding the Government viewed the legislation as too weak

140 out of 621 villages balloted to keep out goats by 1920

Bovill promised land, money, and/or trees as incentive in some cases

- Ongoing Issues with delimitation throughout 1900-1910s
  Complaints regarding land included in delimitation finally boiled over, and the courts began to systematically reconsider all delimitation complaints (law originally stated that delimitation was binding if did not appeal within the first 6 months). Forest Department obviously not pleased.

Bovill Period: 1914-1921, World War I

- Substantial war fellings in the most easily accessible areas. Essentially clear cut the lands which traditionally had served as the grazing and fuel gathering areas of the villages. Trees in less accessible areas of the forest preserved.

- Locals began grazing in those areas and gathering wood without permission during the war reflecting a lack of other options and lack of oversight, perhaps also upset with department. Subsequent attempts to regain order over several of the clear cut areas is difficult.

Unwin Period: 1921-1936

- Unwin hired while on Medical Leave from Nigeria
  His goal was to make the Cypriot forests commercially productive, as he had noted the amount processed during World War I. He either did not know, or did not care, that the World War I figures were only possible because of poor forest management, as he constantly tries to achieve similar levels of productivity during his period of employment.

- Was also focused on the idea of teaching people to have a "forest conscience" and therefore started such activities as Forestry Exhibitions, Cyprus Forestry Association, Arbor Day Celebrations, and encouraged educating youngsters about the forests

Unwin Period: 1921-1936, Specific Examples

- Disagreements with other Government Officials over his strict, anti-goat policies; issues associated with the delimitation continued into this period

- 1924 18 square miles of state forest land burnt in major fires in Paphos forest

- 1925 attempt to move Livadhi village into Akamas peninsula, ultimately failed and attempts stopped in 1928

- 1927 Tribute payment removed; colony responsible for £10,000 imperial defense fee

- 1927-1928 Forest Enquiry Committee formed to examine the numerous complaints surrounding Unwin's Forest Department, also tied into a broader enquiry into the expenditure of the island's departments

- 1928 attempt at budget of £600,000 is an example of Unwin's extravagant plans for the forest. He wanted to build 300 forest huts, 3000 miles of forest roads, bridle and foot paths, 3000 miles of fire traces, 9500 miles of range compartment lines

- 1929 Visit by Troup as recommended by Forest Enquiry Committee, perceives that public unhappy with department and recommends reclassifying forests between major and minor forests, with local uses allowed on parts of the minor forest. Also recommends completely relinquishing various pieces of scrub land (hali land) which were acquired with the thought of one day turning them into forest

- Budget cuts in late 1920s and early 1930s; Unwin repeatedly told to reduce his expenses as the forests were not being commercially productive

- Amendment of the Goats Law of 1913 (Law 18 of 1930) to allow villagers who had passed the Goats Law to keep no more than three tethered goats per household

- 1932 (January 1) title for the head of the department changes from Principal Forest Officer to Conservator of Forests following instructions from Troup to simplify the levels of bureaucracy within the department

- 1934 Unwin ordered to stop commercial felling in the forests as well as to close most timber stores, sell most sawmills, and discontinue any of his "educational" activities, such as the making of knick knacks to sell to tourists; Unwin also ordered to carry out the suggestions of Troup, many of which he had ignored.

- 1935 Shepherds' Licensing Law passed after much debate, as title suggests required each shepherd to be licensed

- 1935 Amendment of the Goats Law of 1913, only a 50 percent majority was required to pass the law, a failure to vote at the specified time would be considered to be a "yes" vote (further minor amendments in 1937, 1948)

- 1937 Unwin retires in January

Unwin Period: 1921-1936, Character Sketch

- 1931 Disciplinary actions taken against Unwin following the unrest of that year

Charged with extorting money and valuables, acts of violence and assault on villagers

- Investigation into charges revealed many aspects of his character and the government opinion of him

  Unwin unhappy with the Cypriots, requested transfers in 1926 and 1929

  Storrs began in 1927 trying to transfer him from the Colony; Storrs recognized that he was mentally unstable, but still thought that he was an excellent forester

  Many others, both in Cyprus and England, also recognized his mental instability

  Nonetheless, Unwin is still not allowed to leave until 1937

Waterer Period: 1937-1951

- Followed a more conciliatory approach, wanted to encourage Cypriots that it was the "People's Forest"

- Special forest votes in budget increased departmental monetary resources

- 1938 Kykko agreed to sell its goats for £7000

- Others soon followed suit; between 1939 and 1945 around £24,100 paid in compensation for selling goats; by 1948 goat grazing completely eliminated from the Southern Range, in Northern Range more difficulties encountered in removing shepherds

- Forest Law No. 5 of 1939, consolidated the previous laws; included provisions for a final "re-delimitation" which would have permanently binding results

- World War II

  Large fellings, although undertaken on a selective system so stated to be less damaging than the WWI fellings

  By near the end of the war, the Home Office and the Governor were concerned about over-cutting the forests and wanted to limit the amount felled; the forestry officials not concerned, and argued with the government to be allowed to fell more

  Beginning of Fuel Conversion Scheme in 1944; inhabitants forced to adopt fuel oil scheme on account of the extreme shortage of fuelwood on the island.

- Colonial Development and Welfare Grants began in 1942; the additional funding also helped to ensure that the department's efforts were carried out

- 1942 also year of first "Village Fuel Area", the modern incarnation of the 1901 Village Fuel Grounds law

- 1946 Livadhi petitions to be moved. Completed in 1955. Villagers moved to site of Baragi, near Morphou; 100 families, the government paid £120 each, and £28,000 for 400 acres of land.

- 1948 movement of "Dhimmata" to Nea Dhimmata began, completed in 1951 at the cost of £13,380 for 14 families. Residents were to pay part of costs, but loans absolved by 1953 on account of their poor financial standing

Chapman Period: 1951-1955

- 1951 the Forestry College opens with students from multiple countries

- Chapman views Waterer period as being a time of sufficient regeneration, and wants to increase commercial exploitation during his period

- Increased felling and research into efficient utilization of the forests

Davidson Period: 1956-1960

- Similar goals as Chapman

- Unrest during the period prevented much forest utilization. Some of unrest directly targeted at department, such as bombs placed at forest station. Other violence indirect, such as fires started by EOKA or British forces.

- Department maintained both Greek and Turkish Cypriot employees, however difficulties arose in them carrying out their tasks, as some had been responsible for portions of the forests populated by people of a different religion than their own

- When the British left, a Turkish Cypriot, I. Sidki, who had been educated in forestry through colonial grants, became the chief officer for one year, but he was replaced by a Greek Cypriot in 1961. Desire to commercially exploit the forest continues over the first several decades of Independence

Information gathered from multiple primary sources including:
Cyprus State Archives
National Archives in the UK (formerly the Public Records Office)
Cyprus Blue Books and Cyprus Gazettes
Interviews with current and past employees

Appendix II: Abbreviations and Definitions

C of F – Conservator of Forests; before January 1, 1932 known as the PFO

CS – Chief Secretary; after May 1, 1925 Colonial Secretary

D of S – Director of the Land Registration and Survey Department, between the years of 1885 to 1895 also held the post of PFO

FDC – Forest Delimitation Commission, in charge of marking out forest areas to delimit

HC – His Excellency the High Commissioner, the chief British officer on Cyprus; after May 1, 1925 Governor

KA – King's Advocate, the chief legal advisor

Kotchan – title deed

Mandra – goatfold

Merra – pasture land, also mera

Mukhtar – mayor

PFO – Principal Forest Officer, the head of the Forest Department; name changed to Conservator of Forests on January 1, 1932

QA – Queen's Advocate, the chief legal advisor

Appendix III: Thirgood and Other Secondary Sources

One does not have to look hard to find multiple accounts of the accepted environmental history within reports by government authors and earlier traveler accounts. However, the number of secondary sources published post 1960 which deal with Cyprus' forests is quite small. Dunbar (1983) wrote a brief article on the topic, and Pyne (1997) discusses Cyprus in the context of fire, but Thirgood (1987) is the only author to devote a book to the topic of Cypriot forests[1]. Therefore, his work is frequently cited by authors discussing Cyprus, and it is still a main fixture in any Cypriot forester's office today.

Thirgood's account meshes well with those published by government authors both in the past and the present. It is perhaps not surprising, since Thirgood served in Cyprus as a member of the Forest Department from 1954 –1956 as the first Forest Research Officer in the Department. He authored several reports while on Cyprus; and his bibliography in particular is a valuable resource (see Thirgood 1955). He appears to have maintained his contacts with the former British forestry administrators over the years, as Chapman writes a forward for him, and he himself acknowledges the help of several others.

Thirgood strongly believes himself to be accurately representing the history of forests on Cyprus, as any author presumably would, and his placement of a Thucydides' quote on one of the first pages of his work only underlines this view - "I shall be content if those shall pronounce my history useful who desire to give a view of events as they really

[1] Comments about the forests under British colonial rule also periodically appear in pieces devoted to a different topic. These comments are usually inaccurate. For example, Bryant (2004) states that "In fact, the forests had begun to disappear at the height of the Cypriot copper mining in the fifth century; the British would abandon their own reforestation efforts in the 1920s" (273, note 4). Varnava (2005) wrote a piece analyzing the British hill stations through a postcolonial lens. Although a full review would be outside the scope of this work, he nonetheless appears to be so concerned with critiquing the British that he errs by presenting every action as having a commonly agreed upon cause behind it. While the early accounts and the continued governmental accounts over-generalize the British actions by interpreting them in too sympathetic of a manner, his article could arguably be said to over-generalize the actions by interpreting them in too negative of a manner.

did happen …". His primary purpose in describing the history of forests on Cyprus is so that others can learn from its lessons, lessons that highlight the skills and the abilities of the British colonial government in terms of forestry. One does not need to read past the Foreward and the Preface to directly see this view. As Chapman explains in the Foreward, and it was through the hard work of the British officials that the natives were taught the error of their ways, and in turn, how to respect their forests (xii). Thirgood states in the Preface that since the Cypriot foresters have maintained the British forestry policies through independence and the 1974 coup, the "seeds were well sown" (xvi) – in other words, the British did a good job of training the previously ignorant Cypriots.

Certainly Thirgood presents a sizable amount of data and has done a good job in summarizing most of the accounts published by experts and foresters during the colonial period. But he relies almost exclusively on the published sources, using only a handful of archival files which do not appear in his bibliography. The combination of his purpose in writing the book and his sole utilization of accounts which repeatedly present the accepted history produces a narrative which heavily favors the colonial voice and mindset. Perhaps because of the passage of time, he is slightly more critical than some (although not all) of the colonial sources, noting that there were periodic setbacks, especially during the Unwin period, and also addressing the uncertainty behind forest regeneration on the island. However, the accepted narrative of the colonial saviors inevitably reappears as he describes how these issues were overcome by the colonial officials' emphasis on teaching the natives to have a forest conscience as well as the department's emphasis on multiple use forestry. For Thirgood, "the greatest handicap was the outlook of the native Cypriot" (1987:113), regardless of what other problems he might recognize within the forestry administration.

Within this context, Thirgood only presents what he deems necessary. Portions of the Cypriot history which are not important, or not favorable to his own interpretation, or are

not recorded within published works are completely absent from his account. Major events, such as the passing of the 1889 law, are relegated to a small note. The legal issues which arose out of the delimitation and the questions of customary rights are called "anomalies" (106) (!). Further, the questioning of these legal uncertainties is described in a negative light – this was not a chance for the natives to right a wrong, but rather "encouraged exploitation of the most shadowy claims" (106). Other events, such as the attempts to move Livadhi in the 1920s (discussed in Chapter 5), are mentioned, but the whole story is not provided – the parts which make the department look poor are omitted. The same is true of the story of Nea Dhimmata, which he describes in an endnote in the following manner:

> Although coming from the most primitive circumstances, the mountain people proved remarkably adaptive when resettled in the lowlands. New Dhimmata, for example, proved to be one of the most progressive agricultural communities in Cyprus and a far cry from the original Dhimmata village of Paphos Forest with only 24 donums of poor land for 14 families and surrounded by rocky tree-covered slopes (356, note 66).

As discussed in the Epilogue, Nea Dhimmata was not a successful experiment in terms of agriculture. Further, the original village's "poor land" is described as a matter of fruit trees and gardens in the archival files determining their worth. Once again, Thirgood has told the story so that it solely favors the colonial view.

Thirgood's summaries and discussions of the published colonial sources are of value, and his work should not be completely discarded. Understanding and recognizing the colonial stereotypes is an essential aspect of the Cypriot history, so the presentation of these publications in one book, with their stereotypes and views accurately presented, is certainly not something to overlook. However, beyond those accounts, his interpretations and discussions connecting them merely repeat the same tired story and encourage its continuation, something which is neither good for the reader nor for the Cypriots in general. His book must therefore be used selectively and with great caution.

On account of these inherent issues with Thirgood, I have utilized his work primarily to represent the standard accepted narrative. Beyond that, if my account happens to agree with his, it is only because I have found independent sources, from the archives and/or colonial published sources, which have led me to a similar conclusion.

Appendix IV: Historical Accounts of the Cypriot Environment

In the following pages, I have provided a summary of the traveler's comments regarding the Cypriot environment prior to the arrival of the British, starting with travelers in the 15th century and finishing with the accounts of the forest provided immediately following the island's occupation by the British. These summaries are meant to give a fair representation of the manner in which island was described, but they are not meant to form an exhaustive list. I have relied upon several compilations of early sources on Cyprus to create this list, as well as the individual traveler's published accounts when I can obtain them.

Preliminary caveats to note

The glimpse of the island these traveler's accounts provide is heavily influenced by the view they think their intended audience would like to see. This is to be expected. It is also strongly influenced by the reasons behind why the authors are traveling. Many of the early authors are on pilgrimages to the Holy Land. Others were traveling for business, while others were conducting missionary work, and yet others were sent by other governments to conduct strategic surveys of the island resources. Many Western sources writing about Cyprus during the Ottoman Period describe the island as degraded on account of poor governance. The political and religious motivations behind these descriptions must be kept in mind.

The traveler's descriptions are also heavily influenced by the time of year in which they visit the island. Visitors during the summer months are most apt to describe a hot, dry, disease-ridden island, while visitors during the winter months are much more likely to describe a lush, pleasant setting.

Finally, many travelers, especially the earlier ones, likely did not venture much further into the island than Larnaca or Limassol. For their descriptions of the places which they did not see, they often relied upon previous sources, usually sources which were commonly known among many of them. Thus, it is not uncommon to see similar general descriptions between author to author. In some of the cases, the descriptions are verbatim, while in other instances, the words have been slightly changed.

With these caveats in mind, one can quickly see several themes emerging over the following pages concerning the Cypriot environment. These include, but are not limited to themes such as that Cyprus is very fertile, Cyprus is very fertile but undercultivated, Cyprus is dry and degraded, Cyprus is exceedingly unhealthy, Cyprus is pleasantly green. The actual historical environment of Cyprus can likely be found somewhere in the middle of these themes.

I. THE 15TH CENTURY

As Grivaud (1990: 23) notes, almost all of the travelers during this time would have been visiting the island between April and October, as that was when the main ships would come and go, and many of them were on pilgrimages to the Holy Land. When there is an environmental description, it generally is limited to the coast and ports, although Grivaud does suggest that one traveler may have visited Kykko (1990:24). Unfortunately, the traveler to Kykko does not include an environmental description of his journey.

I.a. Mamerot, Sebastion. Visited c. 1472. Mamerot describes the island as being very fertile, with beautiful plains, mountains and forests which have savage beasts. Mamerot's description is very similar to that of Breydenbach (see Cobham 1908: 50-51).

I.b. Walther, Paulus. Visited 10-12 July 1482. Walther copies from numerous travelers including Breydenbach (Grivaud 1990:112), and presents a description of the island as being very fertile but very hot. On the island an abundance of grapes, fruit, olives, lac, mel, cera, malagranata, pomengranates, carobs, cassia, wood (linum) and lana. Animals can be had for reasonable prices. Metal and wood can be found in good quantities (Grivaud 1990:113).

I.c. Casola, Pietro. Visited 12-14 July, 1-9 Sept. 1494. Casola's visits relate to stopovers on his way to and from the Holy Land. He describes the sugar production at Episkopi by noting that "they make so much sugar, that, in my judgment, it should suffice for all the world. Indeed it is said to be the best which goes to Venice, and the quantity sold is always increasing….There were not less than four hundred persons there, all employed….There were cauldrons of such a size that if I described them no one would believe me" Grivaud 1990:146).

The island is not solely focused on sugar, however. "There was also a great quantity of cotton in the fields, but it was not yet ripe for gathering. It was also a great pleasure to see so many trees in the woods, loaded with carob-beans, *bazane ultramarine*, as we call them" (Grivaud 1990: 146). He also provides an insight into local construction with his description of house building in Limassol. "I saw that in the said city [Limassol] the inhabitants do not spend very much money in covering their dwellings, because they are covered with green boughs or with straw" (147). He was unable to visit Famagusta or Nicosia because of the plague, which was confirmed by merchants who visited the cities (148).

The lowland forests of Cyprus are being well-utilized at this time, or so it seems from his description of his own party's utilization of them. He states that they traveled by boat

about six miles to the east of Limassol and anchored at a place call La Canute, which he states was close by the Cape of Cats. At the location of La Canute, "there are many common woods….Many *galeotti*, skilled in that work, were sent to cut down wood enough to supply the galley all the time it had to stay at Jaffa, because wood is not to be found there for love or money, and also to get a supply of water, because there were the springs freshly made…" (Grivaud 1990: 148-149).

On his return, they anchor at Larnaca and remain for some time on account of difficulties in gathering supplies. Upon their arrival, "…there was not a single thing to be had" as "Four other Venetian ships were there on their way to Beyrout, and they had taken everything" (Grivaud 1990: 149). They also were told not to venture inland to Nicosia, as people were still said to be dying of the plague. So, they stayed at Larnaca's port, Salines. "We stayed so long at the Salines that whoever on the galley wished to do so got a supply of salt. The salt costs nothing there, and all the world could be furnished without exhausting the supply" (Grivaud 1990: 150).

During this time, they all attempted to find provisions near the port. Initially, they could find nothing but bread and grapes, as the local people were in hiding on account of the poor behavior of a Venetian galley several days before who had taken their goods and refused to pay for them. When the peasants did show themselves, they offered the crew a quantity of soft melons and some carobs. "The quantity of *carobs* or ultramarine beans was almost incalculable. A great trade was done in them, and the quantity brought on board the galley was stupendous…I can assure you that the trade in this fruit is of immense importance and value, and I can say the same of the sugar I saw there" (Grivaud 1990:151).

In order to gather wood and supplies for their return voyage, they put down anchor "somewhere past Cape Bianco" (Cape Aspro on Greek maps), and "*galeotti* were sent out … to get wood and water, and also a few sheep. To obtain these, it was necessary to go

some miles distance from the shore" (Grivaud 1990: 151). Presumably, the ship's crew would have headed toward the Randi area to obtain the wood.

Summary of 15th Century Sources

Thus, in the brief comments the travelers during the 15th century make regarding the environmental condition of Cyprus, one gets a very general view of a fertile island, with potential industries in sugar, cotton, carobs and salt.

II. 16TH CENTURY

II.a. Baumgarten. Visited in 1507, but account not published until 1732. Baumgarten was a German nobleman. He indicates that it was a fertile island, with lots of birds and shady groves of trees. Life on the island is not described as being so pleasant, however. There were few people, and those people were essentially slaves to the Venetians – they had to pay one third of their total income, whether they obtained that money from corn, wine, oil, cattle, or other products, to the State. They also had to work for the State for two days out of every week whenever their labor was desired, and if they could not work, they had to pay a fine. There was also an additional yearly tax on the people, so that the common people could barely keep "their soul and body together".

IIb. Locke, John. Visited Aug. 11-14, Sept. 25 – Oct. 15 of 1553. Locke is the first author thus far to mention locusts, and he states that the island is cursed with them. Otherwise, his account is similar to several of the earlier works. He mentions that the island has a salt pit. He also states that the Venetian ships which land at Limassol take away with them a cargo of wine and vinegar and also "a great store of Carrobi: for all the

countrey thereabout adjoining, and all the mountains are full of Carrobi trees, they lade also cotton wooll there" (Martin 1998: 11).

II.c. Porcacchi, Tommaso. Visited in 1576. Porcacchi noted that the Troodos had a circumference of eighteen leagues, and that many Greek monasteries and trees were contained within it. The harbours, on the other hand, were full of silt (Cobham 1908: 164).

II.d. De Lusignan, Etienne. Published in 1573 in Italian, and then in 1580 in French. He describes the status of the island at the time of the Ottoman occupation, and as part of that description includes a list of the types of fuel wood one might find on the island. These types include trees such as olive, carob, cypress, juniper, pines, kermes oak or pistacia terebinthus (the text is not clear), pisticia lentiscus, oak, Mediterranean hawthorn (*Crataegus azarolus*) (Thirgood 1987:332).

II.e. Moryson, Fynes. Visited May 19-24, 1596. According to Moryson, the island is very fruitful, more so than any other place. The products of the island include corn, oil, cheese, pork, fat-tailed sheep (some of the tails weigh more than twenty pounds), capers, pomegranates, oranges and other citrus fruits, sugar cane (which is made into sugar in mills), wine, "odoriferous Cipres trees", cotton, and many other "blessings of nature". He further notes that in Cyprus it seldom rains. When it does rain, it is in September and October, and it rains quite violently (Martin 1998: 14).

II.f. Dallam, Thomas. Visited in 1599. Although Dallam does not set foot on the island, he does describe it from sea. The island is very pleasant, with low shores and plains

extending back. He saw a "great store of wylde swine" and states that "out of all question, it is a very fruitful contrie" (Martin 1998: 17).

Summary of 16th Century Sources

Thus, the 16th century authors say much the same as the 15th century accounts. They describe a fruitful island, but perhaps an overworked populace (a suggestion that many historians of the period support). Although lack of a statement is not strong evidence, still, none of the authors writing soon after the Ottoman conquest make any statements concerning any immediate degradation of the island. Also notably missing so far are any mentions of fires, especially since the fire season in Cyprus begins in April and stretches through the entire summer.

III. 17TH CENTURY

The 17th century traveler's accounts, while limited, are far more verbose in their description of the island than their earlier counterparts.

III.a. Sandys, George. Sandys perhaps visited Cyprus around 1610 (work published in 1615), as it is unclear whether Sandys ever physically set foot on Cyprus. Nonetheless, he provides a detailed description of the island. As mentioned at the beginning of this appendix, many of these travelers utilized the work of others while writing their own accounts and Sandys may have "borrowed" his descriptions. It is still worthwhile to investigate Sandys' claims, whether he is borrowing them from somebody else or not, in order to get a view of the manner in which the island was commonly described.

Sandys describes Mt. Olympus as being "clothed with trees of all sorts, and stored with fountains" and of there being a number of Monasteries of the Order of St. Basil

located on the mountain (Martin 1998: 19). He also informs the reader, evidently following the classical sources, that the island had been so wooded in the past that even the needs for metal melting could not reduce the forest, and a rule had been made that if a person could clear the forest, that person could claim that land. Its name, "Macaria", reflects this prosperity (Martin 1998: 20).

Sandys also provides a long list of the types of produce that could be found on the island. This list included several types of oil and grain, wine, grapes, citrus fruits, pomegranates, almonds, figs, saffron, coriander, sugar-canes, herbs, turpentine, rhubarb, colloquintida, and scammony. He specifies that cotton wools ("the best of the Orient"), salt, and potash were the staple commodities. Further, "they have plentifull Mines of brasse, some small store of gold and silver; green soder, vitriol, allome, orpiment, white and red lead, iron, and divers kinds of precious stones of inferiour value, amongst which the emerald and the turkie" (Martin 1998: 21).

However, the island is exceedingly hot in the summer as well as unhealthy, and there are issues with serpents. Further, the brooks of the island ("for rivers it hath none") should rather be called torrents, and they frequently are dry (Martin 1998: 22).

III.b. Lithgow, William. Visited in 1611 (work published in 1632). Lithgow echoes many of Sandys' comments, so much so that one wonders whether he might have been borrowing information from Sandys or from Sandys' source(s). He notes that the island produces "infinite canes of Sugar, Cotten-wooll, Oyle, Honney, Cornes, Turpentine, Allum, Veregreece, Grogranes, store of Mettals and Salt; besides all other sorts of fruit and commodities in abundance". He states that the name of the island might come from the "abundance of Cypresse trees" (Martin 1998: 23).

Concerning the mountains, he states that "The chiefest and highest mountaine in this Ile, is by the Cypriots called Trohodos …. There is abundance here of Coriander seede,

with medicinable Reubarbe, and Turpentine. Here are also mines of gold in it, of Chrysocole, of Calthante, of Allome, Iron, and exceeding good Copper. And besides these mines, there are diverse precious stones found in this Ile, as Emeraulds, Diamonds, Chrystall, Corall, red and white, and the admirable stone Amiante, wherof they make Linnen cloth, that will not burne being cast into the fire, but serveth to make it neate and white" (Martin 1998: 23).

"The chiefe Rivers are Teno, and Pedesco…" (Martin 1998: 24), but they do not provide enough water to satisfy the island. "The greatest imperfection of this Ile, is scarcity of water, and too much plenty of scorching heate, and sabulous grounds" (Martin 1998: 23).

III.c. Celebi, Katib. It is uncertain if he physically visited the island, although he does describe it in the Cihan-Numa. Celebi notes that near Paphos, there are said to be "diamond mines". Asbestos, or a rock which can be burnt, can be found on Cyprus. The monastery on Stavrovouni, built of cut stone, is mentioned, although the environmental setting around it is not. In general, Celebi tells us that the climate is hot in the summer, and then in the winter and the autumn it rains frequently. Further, it is at Mount Olympus that two considerable rivers begin, and this mountain is ringed about with many kinds of trees. Other than those two rivers, there are also torrents, which only occur in the winter (Bacqué-Grammont 1997: 205-212).

IIId. Ricaut (or Rycaut), Paul. Visited in 1678 (work published in 1679). Ricaut had been sent by King Charles II to provide an account of the Greek and Armenian churches on the island. Within his description, Ricaut emphasizes the damage the taxes and exactions enforced by the Turks has done to the island (as may have been expected), as well as the poverty stricken situation of the church (Martin 1998: 26).

Summary of 17th Century Sources

The 17th century accounts provide more detail than many of the previous authors. An emphasis on mines and the summer dryness of the island is common. The destruction caused by locusts is also mentioned. Ricaut's comments about excessive taxation become more common in the following centuries, and his comments about the poverty of the church are both supported and questioned over the next several centuries.

IV. 18TH CENTURY

The number of traveler's accounts and the level of detail they include continues to increase during the 1700s.

IV.a. Bruyn. Visited the Island in 1702. Bruyn himself did not travel around the island much, but rather depended upon the accounts of the Cypriots.

He mentions that Ladanum is gathered in the hill country (near Lefkara) on goats' beards (this activity was still taking place in the 1900s). Cotton has replaced the sugar cane fields that Casola had described near Episkopi. Bruyn also states that in 1668, there had been a very bad plague of grasshoppers, but an icon by St. Luke (traditionally described as being kept at Kykko) drove them away. This icon also has the ability to bring water. The island has a supply of Amianthus (asbestos), the wine is plentiful, as is the turpentine and colloquintida. There are mulberry trees in the gardens and lots of wild fowl (Martin 1998: 272-274).

IV.b. Bars'kyj, Vasyl. Bars'kyj provides details on four trips to Cyprus over the course of a decade (1726, 1727, 1730, 1734-1736). His fourth visit, which spanned 2 years, provides a rich description of the monasteries of the island. Bars'kyj was initially trying

to go from Tripolis to Patmos, but was not able to make the full journey because of his own health and issues surrounding travel arrangements. He instead makes it as far as Cyprus in September of 1735, where he stays for some time in the court of the Archbishop teaching Latin to the students (Grishin 1996: 3-6). An earthquake in April of 1735 brought with it an outbreak of violence, and concerns about the plague, which was prevalent in the port towns and spreading across Cyprus. Bars'kyj was therefore concerned about leaving the island for fear he would contract the plague in the process, and he already had a desire to visit the island's monasteries, so he decided to travel through the mountains and "wilderness", going from monastery to monastery and recording what he saw. He was so concerned about becoming ill that he went out of his way to not go into any towns or villages in which he had heard that the plague had been. He visited more than fifty monasteries during this five month journey (27, 28). As Bars'kyj visits many more monasteries than those most travelers do, I have outlined below his descriptions of some of the more common locations.

Bars'kyj visits Bellapais rather early in his trip. He describes the area surrounding it as being "surrounded by high mountains with dense forests and … decorated with trees, and flowing springs and planted groves of cypresses…" (Grishin 1996: 31-32). Bars'kyj also describes the Monastery of Saint Paraskeve[1], which he states is also called Vasilia, following the village name nearby. This monastery is a possession of Mount Sinai, and he describes the monastery as being in an "elevated and attractive" location, with high mountains nearby. A large spring is found in the mountains above, and it flows by the monastery providing water for it as well as the town (34).

Bars'kyj notes that according to tradition, the principal monastery was actually in the mountains above, but now all that remains are some ruins of old buildings. He is impressed by the setting of this abandoned monastery, "situated in a particularly solitary

[1] This is the same monastery as discussed in Chapter 5 of the dissertation.

spot, with healthy air and near a spring of clear water, and amidst a very dense forest consisting purely of wonderful cypress trees" (Grishin 1996: 34). Bars'kyj stresses the isolation of this area, which can only be reached by a "tortuous track" which takes an hour and a half to traverse and even animals do not use (34-35).

At the monastery of Kathara the monks "feed themselves through agriculture and the minding of sheep and goats" (Grishin 1996: 35). Bars'kyj later describes the monastery of Saint George, noting that it has caves near it in the surrounding mountains, where oxen, sheep, goats are kep in the winter or when it rains (37). "The monks are few in number … because of the crippling Turkish taxes….As in the earlier described monasteries, they feed themselves through agriculture and the keeping of sheep and goats" (38).

Bars'kyj's travels take him into Marathasa valley, which he describes as "the most beautiful part" of Cyprus, where "there are forests, an abundance of springs and streams, the mountains are high and the air is healthy, and the men are wise, cunning, and quick-witted …" (Grishin 1996: 42). As the above description indicates, Bars'kyj certainly was fond of this area, in which there were "numerous monasteries, churches and priests" (42).

Bars'kyj speaks briefly of rivers within the Troodos, and he notes that there many small one in Cyprus, with the seven or eight largest ones finding their source in the highest mountain, which he calls Troodos. "These rivers work many mills, create wealth, water the trees and fields …" although those from abroad would view them as streams or springs and not rivers on account of their size (44).

The mountains near Kalopanayiotis are described as being covered with beautiful forest trees, although near the monastery itself Bars'kyj notes that the monks cut down some of the trees to make room for a vineyard (Grishin 1996: 44-45). After visiting Kalopanayiotis and following a four hour walk over forested mountains, Bars'kyj arrives at Kykko. Kykko is surrounded by mountains covered with dense forests, and, although

there are no fruit trees near the monastery itself owing to the steep and rocky terrain, there is an orchard in a southern valley about a half hour walk from the monastery (48). Bars'kyj notes that Kykko has over one hundred monks, but only twenty remain within the monastery. The rest are employed at the smaller dependency monasteries of the main Kykko location, or they are "in the monastic gardens where [they] are toiling and are gardening and planting trees, or are engaged in grazing sheep and goats" (49).

Having traveled further to the west, Bars'kyj states that the monastery near the cave of Saint Neophytos, which he calls the Monastery of Ayios Ekleistras, has two gardens – one, the inner garden, has only mulberry trees and grasses, while the outside monastery has various trees (Grishin 1996: 53-54). He continues to the Akamas and describes it in the following manner. It would take about two days to walk across it and it "is deserted and uninhabited, and is covered with forest trees" (56). Bars'kyj also records the story that regardless of the number of attempts that people tried to clear the area with fire, that the fires would extinguish themselves. He had heard that many hermits lived in the area, but he did not venture further into the area to find out himself as it was an unpassable area, without paths and deserted (56).

Mesopotamos Monastery is described as being "located in beautiful mountains covered in dense forests with numerous pine trees, close to springs with sweet water, near a small river" which could more accurately be called a large stream (Grishin 1996: 64). Another monastery within the Paphos area dedicated to St. Nicholas had its own mill although it was small with only two monks (64). Bars'kyj also describes the Monastery of Saints Cosmas and Damian in the Troodos among high mountains and surrounded by a dense and beautiful forest; walnut trees and numerous other fruit trees surround it, and there are is ample flowing water. The monks support themselves and pay the Turkish taxes through "agriculture and the herding of goats, and in part from the proceeds of the

mill, the manufacture of silk, and from the alms of the pious" (65). There is a well constructed threshing floor outside the monastery (Grishin 65).

Bars'kyj is particularly pleased with Trooditissa. It is located high up in the mountains with dense forests, and surrounding it are fruit trees and three springs, and many singing birds are present. Bars'kyj notes that the location would make a perfect spot for both monks and hermits, although there was only a heiromonk and a novice there when he visited (Grishin 1996: 66).

Bars'kyj describes the summit of Mount Troodos as part of his visit to a Monastery dedicated to the Mother of God of Trikoukkia, which he states is about two hours from the summit. The summit itself is "naked, devoid of trees, and consists only of dry rock. There nothing can survive … because of the bitter frosts and the heavy snows which barely melt throughout all of summer" (Grishin 1996: 68-69). A bit lower down the slope, however, the whole mountain is covered with "wonderful, dense, impassable forest" (Grishin 1996: 69).

The village of Prodromos also garners a favorable description – "a beautiful Christian village with nut trees and flowing water …" named after a church by the same name which predated it (Grishin 1996: 70). While Bars'kyj is in Prodromos, the hegumen himself takes him on a three day tour around Mount Troodos, which he generally describes as "dense forests and wilderness" (70). On the summit of Mount Troodos Bars'kyj reports that there are the remains of a church as sell as some ancient stone walls, which the local leaders, or the monks, told him were all that remained of settlements of the ancients who would come up to the area during the hot summers. Along with his repeated statements concerning dense forests, he also notes that he saw "many ovens in which tar is boiled, as they export a great quantity of tar from Cyprus to neighboring countries. He even spends the night in one of these pits, which was not in use at the time. The area surrounding this pit, he notes, was "very beautiful, more splendid than any other

on Mount Troodos" as it is "a level field covered with grass which is surrounded by a dense forest with numerous natural springs". It traditionally was called the Pasha's pasture ground as he would retire to that spot in the mountains with his staff and horses each summer (70-73)[2].

During this trip, Bars'kyj further comments upon a large flock of eagles who had gathered in a small valley where the water gathered as if in a basin, and that humans would stop and rest there too. He also notes the presence of asbestos near a monastery located in Kourea dedicated to Ayios Mamas (Grishin 1996: 71-72). After spending three months in the Troodos and hearing that the plague had passed by, Bars'kyj heads back toward Nicosia to collect his belongings (77-78). Along the way he stops by several more monasteries, one of which is Makheras Monastery. He notes that monastery has enough "fields, forests, oxen, sheep, goats, olive trees, vineyards, and all other things" it might need to survive (87). He does not give a detailed description of the vegetation surrounding the monastery, but, in a tale told about the hegumen of the monastery, he does allude to the difficulties encountered in trying to bring timber up to the monastery for construction work (90).

As a source of support for the validity of Bars'kyj's descriptions, it is also worth noting that in his descriptions of monasteries located outside of the Troodos, he frequently states that they are located in areas without trees, and also that they are frequently dry. These monasteries support themselves via agriculture and goats (e.g., Grishin 1996: 78-79, 80, 81).

To briefly summarize Bars'kyj's contribution to an understanding of the island's forests, Bars'kyj spends the months of May, June and July of 1735 traveling through the Troodos Range, going from monastery to monastery. Although his descriptions are not

[2] This is the site of the Government camp for the annual summer trek into the mountains by the British, still utilized by government employees today as a vacation spot and still densely vegetated.

botanically detailed, he nonetheless does frequently stress the dense forests as well as the monastery gardens, some in a state of better upkeep than others. Further, in several cases monasteries are located on a big enough river (which he views as a stream) to power a mill, so some of the monasteries are involved in milling. Apart from the produce from their gardens, they further support themselves through any combination of agriculture, flocks, silk manufacture, and alms. Bars'kyj further notes that the Turkish taxes have decreased their numbers as well as been a factor in allowing several to become somewhat decrepit. Through Bars'kyj's descriptions it is obvious that a) monasteries within the forest were not having a noticeably negative impact on the surrounding vegetation, at least in his mind, b) monasteries practiced multiple types of livelihood in order to support themselves, including farming and herding, and c) monasteries located outside of the forests and away from springs were likely to depend upon herding.

IV.c. Montague, John. Visited in 1738 (account printed in 1799). According to Montague, "None of the islands in the Mediterranean can dispute with it in fertility, since it produces a prodigious quantity of silk, cotton, flax, honey, oil, wax, fruits of all sorts, corn in abundance, and the best wine of the universe" (Martin 1998: 35). More specifically, "the country round Baffo is extremely fertile, being watered by a small rivulet, which renders it abundant in corn and fruits of all sorts" (29). Turning to the Northern Range, "Lapethus,…, is now reduced to a small village, known under the name of Lapitho, the territories of which are productive of fruits of all sorts, and in the greatest abundance" (30).

Montague also recognizes the extreme shifts in weather during the year. "Cyprus, in the winter, is one of the most agreeable habitations in the world…the face of the country covered with a most delightful verdure; in the summer it bears a different appearance,

being burnt up by the scorching rays of the sun, and frequently overwhelmed by incredible numbers of locusts…" (Martin 1998: 35). These locusts die in July and August, and he argues that the plague and the malignant fevers are caused by their rotting carcasses (Martin 1998: 35).

However, there is also a negative side to the island. The 100,000 inhabitants (out of whom he states that 3000 were Turks) are some of the most oppressed and poverty-stricken people in the Ottoman Empire. "…they are taxed entirely according to the will of the mouhassil, who, buying his employment at a very high price, is obliged to reimburse himself at the expense of his miserable subjects" (Martin 1998: 35).

IV.d. Pococke, Richard. Visited in 1738 (work published in 1745) (Pococke 1745: 228). Pococke begins his description of the island by noting that Cyprus (especially Limassol) is a very cheap place, and on account of this ships headed to Egypt and other places always stop there for supplies (211, 232). Corn, cotton, and wool is exported, along with the seed of the ilex coccifer (hermes oak, an insect which lives on it can be used to make red dye), and raw silk (232-233). However, he finds it surprising that so many things can be exported, because, while the island is fertile, it is not heavily cultivated or populated.

Landscape characteristics and fear of raiders can explain part of the low percentage of cultivated land. One half of the island is mountainous, and he presumes it would not have been cultivated. The land near the sea was not cultivated because of concern about Corsairs (Pococke 1745: 233), while within the Carpass Peninsula, concern over Maltese pirates produced a landscape with much Cypress and a few Turkish herdsman (219-220, 230). Population is also a factor, as the total population is only 80,000 people[3] (233). Part

[3] One can immediately see the difficulties in population numbers from earlier periods by comparing to Montague's 100,000 figure.

of this low population is because of the system of taxation and land ownership. The island is forced by the grand signor to produce an income some five times greater than would be expected under a fair taxation system. According to Pococke, the grand signor owns all the land, which he then sells to the inhabitants and it is passed down through the male heirs. If there is no male heir, the land reverts to the grand signor[4] (234). Harassment of the Christian population by the Moslems also sometimes drives the Christians to emigrate from the island either permanently or temporarily (234-235).

Pococke describes the Solea Valley as lovely with gardens and buildings which are well watered with springs and rivulets (1745: 224). He also mentions rich iron mines near Lefka, but they were not being worked at the time of his visit (224). There are also supposedly more unworked iron mines along the Akamas Peninsula (225). To his knowledge, there are only two iron mines currently being worked, and this limited number is because of labor – the residents will not work because they would not be well paid by the grand signor's officers (229).

Pococke visits the convent of St. Nicholas, which he describes as being in a very delightful setting, surrounded by fields, woods, water and cascades (1745: 224). He does not specify which Ayios Nikolaos this is, but based upon his comments that an asbestos mine was SE of it, it likely is that of Ayios Nikolaos tis Stegis, near Kakopetria, where bottled water is now produced. He travels from St. Nicholas to St. John (which appears to be near modern Kalopanagiotis) by a very difficult road, and states that he saw a large number of damaged pine trees which the residents "destroy by cutting them at the bottom in order to extract tar" (224). From there, he travels to a convent called "Panaia Cheque" with an icon painted by Luke (Kykko Monastery). As he is one of the early published sources to travel across that much of the Troodos Range, it is noteworthy that, while he

[4]This relates to what is known of the timar system, see Inalcik (1989) and (1993).

describes areas with damage from extracting pitch, his general description of the forests (continued below) is a rather positive one.

Turning to other parts of the country, cypress grows in great abundance on the island, especially on the Karpas Peninsula. Avorados (presumably the aoratos of the 19th and 20th centuries, i.e juniper, although Pococke also mentions juniper below) is also present and grows like a large shrub. There are also many common junipers and pine trees, out of which tar is produced. Carob grows as well, the fruit of which is exported to Syria and Egypt. The most famous tree is the Lignum cyprinium, which is also called rose wood, and resembles a plane tree in appearance. It produces an excellent white turpentine, and a very perfumed oil is produced from it. Common people think it has the power to cure fever (Pococke 1745: 230).

Echoing some of the early travelers, Pococke also notes that Cyprus has no real rivers, but only rivulets, and that is has no fresh water fish, but some freshwater small crabs (1745: 230). He does not think there are any rivers which always maintain water within them (211). Instead, these rivulets become torrents in the winter, and then dry out during the summer. There supposedly was a 36 year drought during the time of Constantine which led to the entire island being abandoned (note that Sandys had mentioned this as well in 1610) (230).

Goats are part of the Cypriot economy. Ladanum is gathered on the hill slopes, either by gathering it off the goats' beards, or by using a string (Pococke 1745: 231). Cows are used for plough animals, but not for eating. Cows are not necessarily the best fit for Cyprus – "a great part of the soil of Cyprus is more fit for goats than for large cattle" (231), and a good cheese is produced from goats' milk. There are very few horses, with mules being used in their place. There are not many game animals on the island – only fox, hare, wild goats, as well as partridge and francolina (231).

IV.d. Drummond, Alexander. Visited in 1745 and 1750 and served as the British Consul in Aleppo. His descriptions were contained in letters to his brother that were published in 1754 (Martin 1998: 56). Drummond was initially uninterested in the Cypriot landscape, noting that after seeing Larnaca and Famagusta in July he was not planning on seeing more (61). He expounds upon this view in a slightly later letter from September of 1945, questioning why any Briton would want to live on the island, "such a disagreeable country; where, though the necessaries of life are abundant, and the prices reasonable enough, there is nothing animate or inanimate to entertain your mind, delight your eye, or amuse your imagination! The men are worse than beasts, the women more ugly than fancy can conceive human females to be…; and not the least vestige remains of antiquity, or even of those remarkable objects which the Venetians might be expected to have left upon the island" (73). However, over the course of this visit and a later one he does eventually see more of the island, and he provides a detailed description of it in the process.

As Drummond views the situation, the soil is fertile, but the laziness of the natives and the poor Ottoman administration, including heavy taxation, discourages industry (Martin 1998: 57-60). While describing the behavior of those collecting the taxes, he notes that "Infinite are the ways by which those ministers of corruption prey upon their fellow creatures….Notwithstanding their silk, cotton, oil, and rich wines, these people will ever be poor and despondent" (67). Further, it is not just the Ottoman tax farmers who "fleece" the people, but also the bishops. He relates the case of an archbishop who in 1743 was stripped of "his archiepiscopal robes, dignity and emoluments" (Martin 1998: 70) on account of complaints to the Porte about how high of taxes he was levying. As an example of Ottoman mismanagement apart from their tax collection strategies, Drummond points out they make only about £200 annually from the Salt Lake at

Larnaca, while the Venetians were able to bring in an annual revenue of about £125,000 from it (63).

Drummond visits Stavrovouni in early September and describes his trip as follows:

> [T]hough all around the country is quite parched, without a drop of water, except what is drawn from pits, and that is always brackish, I was struck by the appearance of the place, which, at a distance, resembled our highlands, and seemed to promise a variety of delightful prospects. I was, however, greatly disappointed; though some few pleasant bottoms occurred to our view, and appeared the more agreeable as they relieved the eye from the sight of barren wastes, and introduced a succession of objects. A parcel of low pitch firs are scattered up and down the mountains, though none of the size of timber; while the plains produce some olives, and a good many aromatic herbs. We ranged over many bare hills, and crossed a number of dry channels; so that during the whole excursion, I did not see one pile of grass, or one drop of running-water, except from one sickly, and almost expiring spring (Martin 1998: 73).

Despite this rather negative description (although one should not be surprised, as it was the end of the summer), he returns to his statement that the island has the capability to be fertile in noting the variety of items it exports. These include silk, cotton, sheep's wool, madder (a dying drug they call lizarin), omber (the brown fossil, they call petran tou troullous, used as a ground-paint, "inexhaustible store in the mountains"), carob beans (or chiratzin), wine, also hams, bacon, goat milk cheese, biscuits, vermicelli, and macaroni (Martin 1998: 71).

Later Drummond undertakes another summer journey from Larnaca to Nicosia, and states that "The greatest part of the country, until we arrived at the river Peroi, which is about eight miles from Nicosia, is extremely barren…" (Martin 1998: 75-76). He also describes the land between Larnaca and Limsassol, nothing that "the country is neither bad nor disagreeable; but all around this place is, certainly, the worst spot in the kingdom, on account of the salt air, the want of moisture, and the almost total neglect of cultivation" (78).[5]

[5] Drummond admits that he knows nothing of herbs, knows little of minerals, and he seems to be confused as to the soil, which he states is naturally mellow and tender.

In a letter written in 1750, Drummond provides a more detailed description of the water resources of the island. “We often meet with the channels of rivers which are not mentioned by the antient [sic] geographers, with a number of rivulets and brooks that flow plentifully during the rainy season; but, as I performed my tour of nine and twenty days, in the months of May and June, those in the plains were generally quite dry; and the rest, among the hills, had little water, having been almost exhausted for the use of the gardens that are near their courses” (Martin 1998: 80). One of these garden areas is Episkopi, and it does not have water worries. “Piscopi is a beautiful large village, resembling those of Great Britain; the adjacent grounds are watered by an aqueduct from the river; broken fusts lie scattered around, and some grand ruins are still visible” (82).

Drummond also traveled over much of the rest of the island. Starting in the NW of the island, traveling from Stroumbi up into Akamas, Drummond notes that,

> The roads are very rugged, extending through several precipices which are dangerous for the traveller: the woods are thin, the hills very bare, the intermediate grounds tolerably good; but the grain was as green as if it had been sown ten degrees north of the plains I had left a few hours before: but about Stroumbi the fields have a better aspect; for in the neighbourhood of the village, which is pleasant and well peopled, one might easily perceive that more industry had been used in the agriculture: and indeed, though all Cyprus, the soil is such as will well reward the labour of the farmer (Martin 1998: 85),

if it were not for the oppressive rule and the locusts (86).

Continuing along the northern coast, Drummond states that,

> At the distance of an hour from the village [Poli di Chrisofou] are what they call the Iron-mines, though this is no more than the place where their furnaces and forges were erected: the ore was undoubtedly found amongst the hills, for here is nothing that resembles it: wood from the mountains might easily be transported hither for smelting; and for this purpose in all probability, the adjacent hills have been left bare of their covering, for scarce a tree is to be seen upon them, while those at some distance are covered with as good pines as any the country affords (Martin 1998: 86).

“Near the river Piaerga [Pyrgos]I dined in a delightful grove of tall spreading trees, hard by which is a very extraordinary rock, almost perpendicular, with a ruined Christian

chapel on the top: this grove is said to have been planted, and the chapel built, by one of their queens, together with what they call a grand palace in the mountains in this neighbourhood" (Martin 1998: 87). At Lefca, which he describes as pretty, he passes a river which he calls the Satrachus. Leaving Lefca, he crosses the Cunara "and entered a deep gutt between the mountains, which are covered with large pines or pitch-firr, and of these they make a considerable quantity of tarr, pitch, and rosin: the river one must often cross, ascending and descending precipices which are frightful to the view…" (87).[6]

Drummond continues by noting that "I have no where seen a more surprising prospect than that which presents itself to the eye, from the top of a mountain near the river Gambo [Kambos]; the numerous hills around rise either in the form of sugar-loaves or sharp wedges; some are covered with tall pines, and others with small firrs, interchangeably; but the most agreeable view is where the verdure is more diversified, and these verdant pyramids afford great variety; such as prodigious sycamores or platanes …or the locust … [and] elm; οσφιλια [Mediterranean hawthorn], a tall thorn; very large … walnuts; almonds; … a kind of alder, the leaves of which shine like a green orange; the backs of them, when young, are yellow; but as they grow old, they turn brown: ανδρουκλια [Arbutus andrachne], which I do not remember to have seen in Europe; the leaf is pretty broad; it bears a small fruit, in clusters, and annually changes the bark, which is extremely thin and smooth; the old is of a fine red colour, but the new coat is white: ζηζηφια has a narrow leaf, and bears a small fruit not larger than a cherry, but of the apple species. There was a great number of others, which I cannot name; but the whole was sweetly wild and agreeable" (Martin 1998: 87-88).

Traveling further into the Paphos Forest, he states that "About an hour from Gambo were the first vineyards I had seen in those parts….From hence, for a considerable way, I traveled through a lane of natural perfumes, such as roses, the first honey-suckles I had

[6] Although Drummond describes pitch burning, he does not indicate any degradation from doing so.

ever seen in this country, and a great number of other fragrant plants and shrubs" (Martin 1998: 88). He then arrived at Kykko. He was not impressed with its appearance, although he notes that under a different government, "the revenues [of the monastery would be] sufficient to maintain three hundred of the fraternity, besides those who manage their farms…; whereas, when I was there, the number of the brothers did not exceed threescore"[7] (89).

His next description is of the Solea Valley, which he states is "the finest in the island"(Martin 1998: 89). He passes by Morphou, and states that "About six or eight miles hence, I was pleased to see the industry of the people, who make the most of the springs from above, by collecting them into reservoirs; and distributing them to the fields below; yet almost all the grounds, for a dozen if not twenty miles together, though rich and capable of improvement, lye quite uncultivated, except in the neighbourhood of these springs: a circumstance which I partly attribute to the lazy, trifling disposition of the Greeks themselves, and partly to the tyranny of the government under which they live" (91). Lapithos is specifically described as follows: "…it has no river, and yet all the grounds of the slope from the mountains are fertile and pleasant, bearing great numbers of natural and planted trees, with fine crops of grain" (91). In the village of Elia, past Lapithos, he states that he saw the first "cypress-trees" of his journey (92).

He continues his journey along the coast and toward the Carpas, and he describes the landscape two to three miles past Malandrina (Melandryna) as having very good soil, but uncultivated and covered with shrubs and underwood (Martin 1998: 92). Continuing on into the Carpas, he states that "The greatest part of the country is extremely pleasant, particularly from Estabomi [Eptakomi][8] to Platonissi [Platanisso], where rising grounds

[7] Bars'kyj had estimated one hundred.

[8] This description lends credence to an argument that the local Cypriots were living sustainably within the landscape, as during the 1880s there was still forest present around Eptakomi for the Forest Department to claim as its own, much to the protests of the inhabitants.

covered with wood, and opening glades, form an agreeable contrast: from the tops of the hills about Liornarissa [Leonarisso] the plains and gardens delight the eye; and there is a great deal of rural sweetness in the neighbourhood of Agios Andronicos, even to Galousa [Yialousa], from which, directly north about a league, is a large, broad bluff head…" (96). From "modern Carpass" "to the point [Cape André accding to him] are little plain spots interspersed with bushy hillocs, but altogether uninhabited" (97). Traveling down the Karpas, he states that three miles from Canakarga they came to Rosala, "surrounded with corn-fields, gardens, gentle swells, pretty tufts of trees, and a natural fence of little hills" (97). In another half hour they came to Komatougalou [Koma tou Yialou], "which is prettily situated, and the fields are well laid out near the sea" (97). His description ends in Famagusta, where his traveling party was initially viewed with suspicion as potential spies sent by the Venetians (98).

Finally, although he does not directly cross the Mesaoria in this journey, he does make an interesting comparison of it to the mountainous areas, noting that it could be a "plentiful country" if it were "not wholly destitute of trees and villages" (Martin 1998: 89). Thus, Drummond provides a solid description of the Mesaoria being treeless in the 1700s. The second part of his description, that it is devoid of villages, is difficult to interpret. Many of the villages on the Mesaoria have long histories, so perhaps he was confused, or perhaps this was a reflection of depopulation at the time.

IV.f. Ives, Edward. Visited in 1758, and he appears to follow Drummond's description quite a bit. Ives talks about climbing Mt. Croce to reach the Monastery of the Holy Cross on top, but he appears to have conflated his knowledge of Stavrovouni with Troodos. Regardless, he states that in his journey to the Monastery of the Holy Cross, he passed through mountains covered "with the pine, oak, olive, locust (or *Carubee*) and walnut-

tree. Here were also the hawthorn, myrtle, blackberry, vine, oleander, and other bushes and shrubs in great plenty" (Martin 1998: 100).

IV.g. Bruce, James, or Bruce of Kinnaird. Visited in 1768 (account published in 1805). Bruce never went onshore in Cyprus, but does describe a portion of it while sailing by on a journey to the Nile (Martin 1998: 102-103). He is familiar with the comments of Eratosthenes about wood on the island, and he states that

> Things are now sadly changed. Wood is one of the wants of most parts of the island, which has not become more healthy by being cleared, as is ordinarily the case. At Cacamo [Akamas], on the west side of the island, the wood remains thick and impervious as at the first discovery. Large stags, and wild boars of a monstrous size, shelter themselves unmolested in these their native forests; and it depended only upon the portion of credulity that I was endowed with, that I did not believe that an elephant had, not many years ago, been seen alive there (Martin 1998: 103).

Since he never traveled around the island, one has to assume that he obtained information from someone who had. Who that person might be is a mystery though, as there are not many authors who speak negatively of the wood supply during this period.

IV.h. Anonymous Author. Visited between June 30 1779 and July 28 1779 (account published in 1784). According to this source, the island produces great quantities of grapes and cotton, and the cotton is better than that of India. "In short, the soil is exceedingly luxuriant, and the farmers would be immensely rich, but for the heavy taxes levied by the Porte, and the rapaciousness of the Turkish governors, who are continually plundering them, till they have reduced them to a state of wretched poverty" (Martin 1998: 105). This traveler left the island perhaps more quickly than planned because of illness. He went back onboard on July 22, although they did not leave until the 28, when every medical attempt to establish the health of his traveling company was proving fruitless (105).

IV.i. Sibthorp. Visited in 1787 (papers published by Walpole following his death in 1796 at the age of 38, Walpole also added some observations) (Martin 1998: 106). Sibthorp visits Stavrovouni on April 12. His description varies a bit from earlier ones, in that he describes what seems to be a full forest on the slopes as he states that, "we lost our way in the mountains covered with the Pinus pinea" (107) However, he also notes that "The mountain, a bluish grey argillaceous rock thinly covered with earth, furnished but few plants; a species of Astragalus… grew in abundance" (107). On his descent he notes that the Pinus pinea was less dense, and that he "observed a new species of Gladiolus, G. montanus, and Thymus tragoriganum, frequent" (107). The level country they came upon at the bottom of the mountain had "different species of Cistus, the Onosma Orientalis, and Lithospermum tenuiflorum" (107). "Swarms of locusts in their larva state often blackened the road with their numbers, and threatened destruction to the crops of corn now almost ripe" (107).

Sibthorp also visits parts of the Northern Range. On the slopes near Bella Paise, he states that the "Pinus pinea, the Cypress, the Andrachne are the principal trees that grow in this mountainous tract" (Martin 1998: 109). As a further description of the surrounding area, he describes a "difficult tract of country called Bel Paese; a ridge of mountains running from north to south…" (109). For Bella Pais itself, he describes it as "a fine remain of an old Gothic structure.…situated in a beautiful recess, surrounded by corn-fields and vineyards, and shaded by trees, whose foliage is kept green by several purling rills, that watered the environs of this romantic spot" (109).

At the end of April, Sibthorp sets out for the Troodos from Limassol. After traveling two hours over a plain, he notes that they passed a little rivulet and "the country was covered with Cistus and Mastic" (Martin 1998: 111). Once they crossed the rivulet, they entered into a "wild mountainous country, and stopped to dine at a Turkish fountain, five

hours from Limesol" (111). After dinner they entered into a more cultivated area – "the sides of the hills were planted with vineyards; little brooks watered the vales below, which were sown with corn, yet green. The mountains of Troados covered with the Pinus pinea stretched themselves out, and terminated the vale. I observed the Styrax tree frequent in the hedges; and the Anagyris foetida in the outskirts of the villages" (111).

The description then takes a confusing turn, as he states that they arrived at the Convent of the Holy Cross, which is usually the name ascribed to Stavrovouni, at sunset. Regardless, he notes that this monastery is "situated in a Greek village, where we observed an appearance of greater affluence than in most of those we had yet seen. Mountains are indeed generally the last retreats of liberty" (111).[9]

Continuing his journey into the mountains the next morning, he notes that "Our road led us through a steep tract of country, well wooded. The Pinus pinea, the Quercus Ilex, and Arbutus andrachne covered the higher part of the mountain; in the vales below grew the plane, the Cretan maple, the black poplar, the white willow, and the alder. After two hours of very difficult road, we arrived at the convent of Troados [Trooditissa]; a Greek Papas …brought us to this miserable cloister"[10] (Martin 1998: 111). They set out the next morning (May 1) to reach the summit in order to see snow. "Having taken a goatherd for our guide, at seven we began our ascent…" (111).

> "[W] e arrived at the summit, where we found a small quantity of snow lying on the north-east side: the pine-tree and the cypress grew on the heights with the Cretan Berbery. The mountain, composed of grünstein, with large pieces of hornblend, and but slightly covered with earth, disappointed my botanical expectations. A species of Fumaria, an Arabis, A. purpurea, with the Crocus vernus growing near the snow, were almost all the plants I observed on the mountain. We now descended rapidly over rocks of serpentine veined with

[9] He is presumably in the Solea Valley, which he mentions more specifically below. His comments regarding the affluence of the villages mesh with those of other travelers who have marveled over the valley's beauty, but they strongly clash with those who describe the mountain men as wild.
[10] As with Unger and Kotschy's later account, he is not impressed with Trooditissa.

> amianth, and in three hours arrived at the bottom. The trunks of the old pine-trees were covered with Lichen purpuraceus[11] (111).

He next describes the Solea Valley, "the most beautiful we had yet seen in the island; well watered and richly cultivated. Green meadows contrasted with the corn now ripe, hamlets shaded with mulberry-trees, and healthy peasantry busily employed with their harvest, and the care of their silk-worms, enlivened the scenery" (Martin 1998: 112). After traveling several hours they spent the night in a Greek village and set out the next morning towards Peristerona. Now,

> the country now became more barren; the hills were covered with Cistus Creticus, from which they collect Ladanum: some land was sown with corn; but this was almost devoured by the locusts, which had now their wings, and flew in swarms destroying every green plant. No vegetable escaped their ravages, expect some prickly cartilaginous plants of the thistle tribe (112).

They arrived at Peristerona after five hours, and it took them another five hours to reach the convent of the Archangel, a small distance from Nicosia (112).

A more general description of the island is provided in a later section edited by Walpole. As has been noted for several centuries now, the rivers dry up in the summer; Sibthorp notes that no real fish can be found, only eels (Martin 1998: 115). He further states that, "Cyprus, though possessing several of the Egyptian and Syrian plants, yet, from the scarcity of water, the great heat of the sun, and the thin surface which covers the upper regions of the mountains, can scarcely be considered as rich in plants" (116).

> Notwithstanding the character of woody given to it by Strabo, when measured by a northern eye, accustomed to the extensive woods of oak and beech that we find in some parts of England, or the sombre pine-forests of Switzerland, Cyprus appears to have little claim to the appellation of woody. The higher regions of Troados are covered with Pinus Pinea; this, mixed with the Ilex, and some trees scattered here and there in the valley below of the Quercus Aegilops, are the only trees that can be regarded as proper for timber. The carob, the olive, the Andrachne, the Terebinthus, the lentisc, the kermes oak, the Storax, the cypress,

[11] The fact that they employed a goatherd as a guide suggests that flocks were grazed in this area, and thus grazing flocks in the Troodos was a centuries old tradition by the time of the British arrival. Further, his description of trees in the valleys and on the slopes suggests that the goats likely were not causing much harm.

> and oriental plane, furnish not only fuel in abundance for the inhabitants, but sufficient to supply, in some degree, those of Egypt[12] (116).

As with Drummond, it is important to note the distinction made here between woody as meaning containing forests full of timber, or woody meaning containing forests full of fuelwood. Cyprus, following this description, is not a good timber producing island, but it does produce enough woody plants to supply its fuel needs. Further, it is worthwhile noting that there is no hint of degradation in this description – just a difference in types of trees and their uses. Finally, as with many of the other travelers, Sibthorp notes the oppressive taxation, which he states causes annual emigrations of large numbers (110).

Summary of 18th century accounts

Thus, by the close of the 18th century, a more detailed description of Cyprus is available. The oppressive Ottoman taxation is often mentioned as reducing the production on the island, but nonetheless the island is still a fertile area. The rivers dry up in the summer, locusts are a problem, and fever can be an issue as well. There are trees on the mountain slopes and in the valleys, but these trees may not be appropriate for timber in the European mindset. Pitch is being produced. Solea Valley continues to be described as cultivated and green, while Episkopi also retains its description of being a fertile area, whether for sugar cane or cotton.

V. EARLY 19TH CENTURY ACCOUNTS

The number of descriptions of the island increase dramatically in the 19th century. German authors were sent to survey the island in mid 19th century, and these surveys only

[12] Walpole, in his 1817 Memoirs, pp 284-285, also describes a type of plant called Ferula Graeca, which he states is one of the most important plants on the island (116-117). The inhabitants evidently call it ναρθηκα, but I have not been able to find a direct link to what it is. I am assuming that it is a type of juniper or myrtle. The only other reference to it that I can find is in an 18th century encyclopedia.

increased leading up to and following the British occupation in 1878. More generally, the "grand tour" which authors from previous centuries had undergone was now more readily available to the well-to-do in European society, and traveling was a fashionable activity.

V.a. Clarke, Edward Daniel. Visited in early June of 1801 (published in several parts between 1810 and 1828). Clarke describes the area around Episkopi as being the most fertile part of the island he saw. He also notes that "Towards the southwestern district the country is well covered with forest trees, and particularly the neighborhood of Baffa" (Martin 1998: 121). However, the heat is so excessive that journeys have to be made during the night, and even the natives do not dare to venture out during mid-day (121). Further, plague is an issue at Nicosia (132).

As with the previous authors, he states that the island's rivers dry up during the summer months (Martin 1998: 133). Again, as with previous sources, he also notes that the island can produce good quality produce, if only it were not for the oppressive Ottoman system. "Instead of a beautiful and fertile land, covered with groves of fruit and fine woods, once rendering it the Paradise of the Levant, there is hardly upon earth a more wretched spot than it now exhibits. Few words may forcibly describe it; Agriculture neglected – inhabitants oppressed – population destroyed – pestiferous air – contagion – poverty – indolence – desolation" (124). "The Greeks are so oppressed by their Turkish masters, that they dare not cultivate the land: the harvest would instantly be taken from them if they did" (128-129).

V.b. Hume. Visited 1801 (account published as part of Walpole's 1818 Travels). Hume appears to have only visited Larnaca and Limassol. He paints a rosy picture of the island, so one might assume that he did not visit in the summer. The plain of Limassol is quite fertile, and "[t]here seemed to be no want of provisions; they have sheep and fowls in

great number; the gardens abound with vegetables, and the vines hang almost every where in the villages with luxuriant clusters. The desserts on their tables consisted of the finest fruits, musk and water melons, apricots, &c." (Martin 1998: 136). The level of difference between Clarke's and Hume's description is so great that one could almost imagine that they were describing different islands.

V.c. Bramsen, John. Visited in 1814 (published in 1818). Bramsen[13] does not think the island has much to offer; in fact, he recommends avoiding it all together, as there is nothing of worth but antiquities which the Turks will not let foreigners research (Martin 1998:142). If one does need to visit the island, he recommends waiting until November, as the island is too unhealthy prior to then, especially between June and October (142-143).

V.d. Kinneir, John Macdonald. Visited between Jan 2-24, 1814 (published in 1818). Kinneir was a captain for the East India Company who over the course of his visit describes quite a bit of the island. He begins his description by noting that the country around Famagusta is mainly uncultivated, and a thorny weed covers its sandy, bleak and rocky surface (Martin 1998: 146). The landscape between Famagusta and Larnaca does not improve. It was "so bare and desolate, that there was not a single object on which the eye might repose with pleasure. I saw neither villages nor trees, nor even shrubs, excepting the small thorn before mentioned, which covered a vast and dreary flat, over

[13] He may have been utilizing Clarke for some of his information, as he describes the woman as being good looking, which is something only Clarke has said thus far. "The women of this island…are generally tall and well shaped, but of a pale complexion; they are conspicuous for their fine blue eyes and well turned hands and arms, and are graceful in their persons….They wear less covering on their bosoms than a European eye could reconcile with decency. They marry very young, and it is remarked that after this a few years are sufficient to blight their beauty; they then begin prematurely to look old, and grow careless of their persons" (143).

which we traveled for thirteen miles to the village of Ormidia" (147). As they approached Larnaca, they had to traverse through a "flat and marshy country" (147).

His description of the vicinities around Paphos and Kyrenia is more positive; these areas are "the most fertile, as well as the most agreeable parts of the island" (Martin 1998: 148). Around Paphos he notes that one can find "oak, beech and pines, groves of olives and plantations of mulberries. Cyprus is remarkable for the fineness of its fruits, wine, oil and silk; the oranges are as delicious as those of Tripoli, and the wine, which is of two kinds, red and white, is sent down the Levant…" (148). As for the area surrounding Kyrenia, he describes the coastline as the "the finest part of Cyprus I have yet seen: a narrow belt of land, covered with shrubs and trees, confined on one side by the sea, and on the other by the mountains, extended to the E. and W. as far as the eye could reach" (151). Further inland, "…the stately towers of the convent of Bella Paisa rose amidst the wooded cliffs of the mountains…" (151) and "It is difficult to imagine a situation more convenient or delightful; lofty mountains and hanging cliffs, clothed with wood and verdure, rise immediately behind, and continue to extend in successive ridges both to the E. and W.; a fertile plain spreads to the channel, formerly called Aulon Cilicius, which is bounded by the rocks of Mount Taurus, mantled with snow" (152)..

As with the previous travelers, he complains about the excessive Turkish taxation, although he also implicates the "lazy and avaricious monks" (Martin 1998: 148), whom the peasants are compelled to support. For him, the Greek peasantry "are the only industrious class" (148), but

> they are now reduced to the extremity of indigence, and avail themselves of every opportunity to emigrate from the island. The governor and archbishop deal more largely in corn than all the other people of the island put together; they frequently seize upon the whole yearly produce…; nay, it happened more than once during the war in Spain, that the whole of the corn was purchased in this manner by the merchants of Malta, and exported without leaving the lower orders a morsel of bread (148).

V.e. Light, Henry. Visited in 1814 (published in 1818). Light was a captain of the Royal Artillery in Malta and stopped by Cyprus on a journey to Egypt, Nubia, the Holy Land, and Mount Lebanon. As with the previous travelers, he complains about the Turkish administration. He argues that the "barren waste overrunning on half the island" (Martin 1998: 159) could easily be made into a flourishing country under the control of someone like Britain. Under the proper control, the constant emigration of people would also stop (he suggests the population is around 70,000 to 90,000 inhabitants). Further, he laments the level of salt production reached by the Turks, as it was much larger under the Venetians (154). He also complains about the level of illness on the island, stating that "To guard against the effects of the *mal aria*, a European must leave the plains in the month of June, seek the mountains, and not quit them till October: without this precaution he must inevitably be seized with illness, and often is carried off by the fevers that rage with great violence during the hot months" (155).

As for specific ecological descriptions, Light journeyed to Stavrovouni from Larnaca on October 8, and describes a poor and wretched peasantry living on the plains amongst little vegetation except briars and olives. Once he started climbing the mountain, however, he came across myrtles in full bloom and fir trees (157).

V.f. Turner, William. Visited from March 11 to March 22, and October 3 to November 8 of 1815 (published in 1820). Turner worked with the British embassy in Constantinople and recorded a detailed description of the island when a planned trip to Constantinople had to be cancelled (Martin 1998: 159). The Cyprus which Turner sees looks to him to have been damaged by fever and oppressive Turkish rule, although the fever itself was mild in 1885 (168). The population has dropped to around 60,000 to 70,000 (40,000 Greeks) and Nicosia and Larnaca are the "only populous towns of the island, the others

being almost desert" (159-161, 166). However, "imperfectly as it is cultivated it abounds in every production of nature, and bears great quantities of corn, figs, olives, oranges, lemons, dates, and indeed of every fruit seen in these climates: it nourishes great numbers of goats, sheep, pigs, and oxen, of which latter it has at times exported supplies to Malta. Its principal commerce consists in cotton, wool, provisions … and silk, of which latter the trade was 150 years ago so considerable as to attract here an English factory" (161). Further, Cyprus is more civilized than one would expect to find most often in Turkey, and the living is very cheap (163).

This theme of a fertile, but mismanaged island continues throughout his descriptions. On his journey on March 20 from Larnaca to Idalium, he notes that the "road lay through an extensive plain of a dry but fruitful soil, not one-tenth part of which was cultivated, and that by a miserable wooden plough…" (Martin 1998: 165). He also notes that the plain is bordered by low mountains which have sandy white, naked tops, and bases covered with brown moss (165).[14]

On Turner's return to the island in October, he visits Thecla Monastery (in Larnaca district) to attend the festival for the fete-day of St. Thecla. The first hour and a half of his journey was over an uncultivated high plain covered with heath[15] and thistles, and the next two hours took him over low mountains which had a naked sandy-colored earth as well as through uncultivated valleys full of heath, wild flowers and thistles. He did see some signs of cultivation, some vines and few olive trees as well as some laurel bushes, near the three villages they passed (Kalon Khourgon [Kalo Khorio], St. Anna [Ayia Anna], and Psefgas [Psevda]). At one of those, Psefgas, he saw a considerable mountain stream [Psevda potamos]which was dry because the rains had been limited in April and May (hence the fever being low, in his mind). "Owing to the want of rain, all the land

[14] This is similar to the "moon-scape" description many travelers today make of the area.
[15] Baker in 1879 complains about the misuse of the word heath by travellers, as does Holmboe in 1914.

(which, when I saw it in February was quite green) is now burnt up by the sun" (Martin 1998: 169).

He describes the area around Thecla as "beautiful: it was a valley full of olive, fig, and mulberry trees, and laid out in gardens, through which ran a small mountain-stream, whose banks were every where covered with olianders in flower. The mountains around of grey rock and of earth, of different, and some of very lofty, height, were well clothed with brushwood, and plentifully scattered with wild pines" (Martin 1998: 169).

From Thecla he traveled to "the convent of St. Barbara, which was higher up the mountain, on the road to the summit of Sta. Croce, the ancient Mount of Olympus: we reach it at a quarter-past five, after just an hour's riding through a fine hilly road covered with wild pine bushes, tamarisk bushes, and brush-wood, but very little cultivated, and that only in vines, of which there were but few fields. St. Barbara [Ayia Varvara] is a recently-built convent, small, but beautifully situated at the foot of Sta. Croce, and surrounded by the richest land, which the caloyers cultivate and lay out in vineyards. I ascended the mountain immediately….The road was steep and abounded in precipices, but wildly beautiful, being covered with pine bushes and brush-wood; and the valley below, which, in the rainy season, is the bed of a stream, abounds in laurel and oliander" (Martin 1998: 169-170). From the top of the mountain, "very little cultivation was visible, and that only of olive trees and vines: the mountains were generally naked, but those round Sta. Croce were clothed with pine bushes, and other wild verdure: the convent is built on an isolated precipice of grey rock, which overhangs the mountains below" (170).

On another journey going from Larnaca to Famagusta, he states that the Larnaca plain is very rich land, but uncultivated except near towns or villages, and is "covered with rich long grass, heath, palm, and tamarisk bushes" (Martin 1998: 171). He also notes that over the course of the whole journey he continued to see similar fertile land, "displaying, that

is, the greatest richness in its abundance of brush-wood, and the length of its grass" (171), but most of that area was uncultivated, with only maybe 50 acres in cultivation (vineyards) (171). He suggests that the lack of cultivation near Famagusta is on account of a lack of people to cultivate it, hence it has developed into a "scene of heathy barrenness"[16] (173).

This similar scene of uncultivated "heath-covered" lands is also repeated for the journey between Athienou and Nicosia. The landscape was "a very rich plain entirely uncultivated (except in the immediate neighbourhood of a village,) covered with long grass, brushwood, heath, and thistles, and occasionally varied by low round whitish hills, sometimes of earth, and sometimes of stone. At one we crossed a mountain stream [Yalias], now dry, but in winter considerable, over which lay a good stone bridge of six arches, built by the Venetians…" (Martin 1998: 173).

Heading west out of Nicosia, he came across fields of corn near the city but no vines (Martin 1998: 175). Traveling on to Kakotopia [Kakopetria] he notes that "except in the immediate vicinity of Nicosia, and of one or two villages which we had passed, the plain was utterly uncultivated, and overgrown with heath, brushwood, and long grass, though the land was of the richest nature and frequently of a reddish colour" (176). "From Kakotopia [Kakopetria] we rode to the sea for three hours over a beautiful plain of the richest and best cultivated land I have seen in Cyprus, owing to there being a greater number of villages than usual collected together. It was laid out in continued fields of maize, corn, and vines" (176).[17]

[16] This is certainly a different way to approach the landscape than that followed by Kinneir. Turner appears to see potential in this part of the island, that it could be fertile if cultivated, while Kinneir just saw barrenness.

[17] He appears to be in the Solea Valley, and it is noteworthy that even though the he describes the area as densely populated, he also describes the vegetation in positive terms, implying that the inhabitants are working the surrounding landscape in such as a way as to maintain a sound appearance.

V.g. Von Richter, Otto Friedrich. Visited in March of 1816 while traveling around the Near East. Following his death in 1816 in Smyrna, his notes were published by his tutor in 1822. He saw the Karpas first as he was sailing to land at Famagusta, and he describes the Northern Range of mountains going up the peninsula as being "covered with low trees, or, for the most part, barren" (Pohlsander 2006:15). He travels along the eastern portion of the island, and in his description of the scenery between Famagusta and Larnaca he states that only seldomly came along villages while riding across the plain, and when he did it would have "poorly cultivated fields and gardens" (17). He also provides a clue as to the system of flock herding practiced on the island as he observes that "flocks of sheep with long silk-like wool and fat tails and also goats of three colors, roam about in the far-spread desert; they probably leave it during the summer when everything is dried up, and move into the mountains" (17).

Von Richter also provides one of the earliest accounts relating deforestation on Cyprus with drought. It is unclear if this is what he thinks, or what his "rich Greek" host named Petraki who owned a portion of the land near the spring at Kythrea told him. He begins by noting that the level of taxation under the Ottoman rule is very high, and has been forcing Greeks to leave Cyprus daily. He then notes that the island's land is "rapidly heading for complete devastation. Lack of order and shortsighted greed destroy the forests, and thus the springs dry out; rains occur less frequently and the fields, scorched by the sun, do not produce; the peasants, who on top of everything else are always exposed to exploitation by the government, escape; wasteland and unhealthy marshes take the place of previously flourishing villages and gardens" (Pohlsander 2006: 23). That description of the relation between forests and the destruction of the landscape will become common by the latter part of the 19th century.

V.h. Carne, John. Visited in 1826. Carne provides an interesting comparison to Turner's descriptions, especially as he seems to be traveling during the summer months. Turning to Larnaca, he notes that "the country around Larnica is perfectly naked and rugged, and the climate sultry and unwholesome" (Martin 1998: 193). The island in general was "desolate and ravaged" (194) on account of the unrest following the Greek rebellion. "Chateaus and their rich gardens laid waste and deserted, and their surviving possessors dependant on others for shelter and support….Large domains of land could be bought for a trifle; and a chateau, with a garden, together with a small village on the domain, and an extensive tract of land, were offered for a few hundred pounds" (194). He describes little else of environmental note besides Cytherea [Kythrea], which is states is very abundant in water and gardens (195).

V.i. American Missionaries. An account of the situation on the island in the early part of the 19th century can also be gleaned from missionary accounts. Tollefson (1990) has compiled the accounts of American missionaries contained within letters from the early 19th century. His sources do not touch specifically on forests, but they do give some descriptions of the general state of the economy and the environment during this time.

As with the previous travelers, taxation is presented as being quite over-bearing (79), and the missionaries noted in the 1830s "…a condition of economic stagnation which they blamed on governmental policies – in particular the Ottoman practice of awarding the governorship annually to the highest bidder, and then allowing him to collect as much in taxes as he could. They estimated that 'not more than one-sixth or seventh part of the soil is in a state of cultivation'" (83).[18] The missionaries also note monopolies as to

[18] A yearly wage for a village laborer averaged around $30 a year, and for a farmer or vineyard owner between $50 to $200 a year, and taxes per year could range anywhere between $2 to $20.

whom the crops could be sold, including the Turkish administration and the Greek Orthodox church (also noted by Kinneir) (83).

The missionaries summarized the system by stating that "'The policy of the government is dark and gloomy. It makes no roads and repairs no harbors. There is no shipyard, public or private, and indeed seldom is a boat built and launched'" (84). As many have suggested that the forests of Cyprus were destroyed by shipbuilding, this statement is quite intriguing.

Besides the economic difficulties induced by taxation, they also note, as others, that disease and extreme weather visited Cyprus. "The missionaries recorded oral histories of plagues in 1800, 1814-16, 1832, and 1834. The 1814 plague was said to have killed 14,000 people; the 1834 plague 5,000. The mission itself observed a terrible drought from 1836-1838 in which people were selling 'their shirts, pantaloon, and the boots from their backs to beg a little food for their families'. Many fled to Syria and Asia Minor" (84). The drought ended by the rainy winter of 1839, but, ironically, the rain produced an increase of fever cases. "According to the mission, taxes remained the same even during times of famine and disease….The missionaries concluded that 'the root of the whole evil lies in farming out some province to a governor for money, who will, of course, make the most of his bargain'" (84).

Summary of Early 19th Century Accounts

To summarize the first third of the century, the travelers' accounts consistently describe an oppressive system of taxation, and note that this system has affected the level of cultivation on the island[19]. However, that is not to say that the island is not fertile – merely that under its current system of governance it has no incentive to take advantage

[19] Unfortunately, since my sources were western European, it is difficult to determine how much of the complaints are extrapolated from a general dislike of the Ottoman system, and how much are based upon verifiable instances of exploitation.

of its fertility through cultivation. The only specific mention to forest degradation can be found in von Richter's account, a foreshadowing of what is to come. Apart from his account, the repeated references to heath[20] or brush covered land would suggest that, if anything, fuelwood was more readily available outside of the forest than in previous decades. The references to illness, drought and depopulation also imply that the stress on the land and the demand for fuel and timber supplies might have been at a lower level during this time than in some of the previous centuries.

VI. MID 19TH CENTURY UNTIL BRITISH ARRIVAL

VI.a. Kotschy, Theodor. Visited in 1840, 1859, 1862 and published in 1862, and in 1865 with Unger. He publishes the data he collected in his January 1859 visit in an 1862 article in Petermann's Geographische Mittheilungen. During his 1859 visit, he travels to Buffavento, and he speaks positively of the landscape surrounding the Monastery of St. Chrysostomos near Buffavento. He notes that tall walnut trees rising through the valley up to the monastery indicate the presence of water, and he also notes the presences of many half grown and several old cypress trees on the slope to the southwest of the monastery. He attributes the presence of these trees to the fact that no goats are allowed to graze there (Pohslander 2006: 89-90).

He also travels to Mount Olympus in the early part of April. They approach the mountains from the north, and he notes that "the whole northern slope from the high mountain down to our path is covered with dense forests of deciduous trees and green spruces …. Bushes of olive, myrtle and others common in Mediterranean flora lined the sides of our uneven and partly rocky path" (Pohlsander 2006: 92). His traveling party stopped in Evrico [Evrychou] and he describes it as a very pleasant place. The valley

[20] The Cyprus landscape could not be fairly described as heath-covered, a point that Baker as early as 1879 takes pains to illustrate. Rather, the repeated references to heath represent, in his mind, accounts written by people who have not fully researched the island (Baker 1879: 116-117).

bottom, “one quarter of an hour wide”, as well as the lower slopes were cultivated and irrigated, while the higher slopes were planted in mulberry trees and grape vines. The farmsteads surrounding the area appeared prosperous to him (92). There was snow on the ground which had fallen the previous night (April 4) when they arrived in Prodromos, and the next day Kotschy was able to gather a large number of plant specimens.

No mention is made of Unger’s later suggestions regarding the extension of cultivation for Prodromos (in the 1865 publication) in this work by Kotschy, as the village is described as having extensive vineyards, as well as fields extensive enough to feed fifty families who live in twenty-eight houses in which grains as well as potatoes are grown (Pohlsander 2006: 93-94). Kotschy stops by Trooditissa Monastery, which is located in a “narrow forested gorge” (94) as he is leaving the mountains, and he notes that the monks served him a meal of “boiled rice with fat, a cereal with milk, dried meat of moufflon, …, excellent cheese, and fresh bread” (94). His description of his meal is of note as in his 1865 co-authored work, Unger states that he found no dairy in that area (Pohlsander 2006: 94).

VI.c. Unger, Franz Joseph Andreas and Kotschy, Theodor. As noted above, Kotschy visited the island several times (1840, 1859) before he joined with Unger and published their 1865 work based upon their May 1862 fieldwork. In his 1859 work Kotschy had focused upon the island’s botany and had not focused much on the question of degradation (although he did mention the negative effects of goats). The story changes in a chapter written by Unger in the 1865 work, which seems to be largely designed to expound upon the ruined state of the forests, especially throughout pp 484-500.

Unger describes an open forest with Pinus maritima (P. brutia) below 4000 feet (1220 m) and P. laricio (P. nigra) above 4000 feet (Unger and Kotschy 1865: 484). He notes that trees are widely separated, fighting with bushes for space. Further, those trees which

he does find frequently have no branches and rarely have straight trunks. He states that he came to realize that neither the government nor the population had the slightest idea about how much of a valuable thing they are mindlessly wasting (485).

Unger especially puzzles as to why, after mutilating the tree by removing all of its branches, the inhabitants do not also utilize the trunk. He suggests that the main reason is the lack of good tools to work the trunk, as there are no saws on the island, only axes. Unger further notes that if the inhabitants desire to make use of the branches on a tall tree, they prefer to cut down the tree to get to its higher branches, rather than climb up the tree and cut off the branches from the standing trunk. They say that cutting down the tree allows them to harvest much more wood in a smaller amount of time (Unger and Kotschy 1865: 486).

The customs regarding the collection of firewood also help to explain part of the forests' appearance. Unger notes that firewood usually is gathered from undergrowth, and it is the duty of the women to collect the firewood. However, in forested areas where there is not much undergrowth, the women resort to felling young trees for firewood (as they are unable to fell anything larger than a small, young tree), thereby destroying the young vegetation and affecting the regeneration of the forest. The collection of fuelwood also explains the lack of vegetation near village areas (Unger and Kotschy 1865: 487).

However, the destruction of the forest detailed above are not the only types of forest destruction on the island. In the higher mountains, where P. nigra prevails, the forest is destroyed via resin collection. Just as a forest fire can turn a large area into ash and be a large evil for a country, so can resin collection, albeit more slowly but nevertheless just as damaging both for the present and for the future (Unger and Kotschy 1865: 489). Unger questioned the inhabitants of Prodromos about who was working the P. nigra trees, and the inhabitants told him that it was not them, but other strangers who enjoyed causing such destruction to the forest. Unger does not believe them as this does not seem feasible

to him, especially since about a third of the forest had been damaged by fire, and these trees were scattered in random areas throughout the forest, as opposed to being in a localized area as one might expect to be the case if strangers were to blame for the damage to the forest (490).

Unger received what he thought were even more naïve (or unknowledgeable) answers to his enquiries concerning who owned the forest. The inhabitants stated that they knew nothing about state rights to it, and that the village municipalities had the right to use the forest to the extent that it did not obstruct the same rights of neighboring municipalities. They found his surprise that there was no set ownership over the forest or forest use strange, as to them the forest belonged solely to the creator (God) (Unger and Kotschy 1865: 490).

Unger also notes the presence of several other types of trees in other parts of the island. There are scattered remnants of several types of oak (*Quercus pfaeffingeri* and *Quercus inermis*) which now are present in a much more limited area and number than in the past. Unger also speaks of *Cypressus horizontalis*. This tree can currently only be found in isolated or small groups on the slopes of the northern mountain chains. Beyond these scattered examples of what must have been formerly more pleasant expanses, there were examples of young trees around the Chrysostomo Monastery (493). Unger also notes the presence of *Juniperus phoenicia* along the northern coast which was being utilized to create charcoal (Unger and Kotschy 1865: 494).

As Unger believes the accounts of the classical sources that forests would have stretched over the whole island (he cites the famous Eratosthenes passage in Strabo), he automatically views what forests he does see on the island as merely remnants. Thus, just by definition, the forests are already in a ruined state, and the forests which have remained have only been able to do so because of their inaccessibility. Now, however, the inhabitants are encroaching upon that inaccessibility with their resin production and

firing as well as their felling of the trees for timber in the lower ravines so that it can be transported on donkeys to Galata for exporting. There is the risk that the country will be robbed of the last remaining bits of forest on account of these actions (Unger and Kotschy 1865: 491-493).

Unger then returns to the Troodos forest to provide a more general description of it. He considers it to be a timber forest, with two to three hundred year old trees being the prevailing type, younger trees less common and saplings rare. It is uncommon to find a tree without mutilated bark or wood, and the trunks are sometimes charred. The trees themselves stand far apart from each other. Towards the summit of Mount Olympus, the pine forest turns into thick juniper bush, and then finally into a treeless dome where even shrubs are rare, although the moister sleep slopes have a denser forest with complex epiphytes growing on their trunks. When summarizing it all, Unger states that it is a picture of misery (Unger and Kotschy 1865: 494).

Intriguingly, despite all of Unger's negative comments, he does not devote time to complaints about goats, although he does note that a field for pasturage existed at Trooditissa which had fallen out of use, along with its garden. He states that on some levels the village of nearby Prodromos resembles that of an Austrian village with its vegetation resembling that of alpine herbs, although the presence of *Quercus alnifolia* and *Arbutus andrachne* combined with the lack of gardening or dairy products alerts one to the mistake. Again, his comments about the lack of dairy products raise questions about the role of goats. When the British arrive on Cyprus they also complain about the lack of dairy, but they are referring to the lack of cow milk. Is this so with Unger, or is he implying that there are no milk producing goats in the village either? If so, this suggests that transhumance had to have been practiced within the mountains (Unger and Kotschy 1865: 497-500).

VI.d. Friederichs, Carl. Visited Cyprus in October 1869 in order to obtain antiquities. Account published in 1872. Friederichs does not spend much time on the environment, although he does include short descriptions of the appearance of several locations and emphasizes the distinction between the climate on the hot plains and that in the mountains. In general, since Friederichs is not trained as a botanist, and is on Cyprus for different reasons than the vegetation, one could assume that his descriptions are similar to what an average traveler to the island would likely notice.

Friederichs describes Larnaca as dreadful, lying "in a desert of sand, a treeless, waterless, and sad desert, which is twice as sad at this time of the year, when all herbs and flowers have wilted away long ago" (Pohlsander 2006: 134). He notes that even in October the temperature was still 24° Celsius and that he finally understood the "deadly power of the sun (134). He traveled to Dhali from Larnaca, a distance he states takes five hours on camel. At Dhali, the ancient Idalion, he marveled at the "abundant and good water, not from the river, which is completely dried up in the summertime, but from good wells, which are, however, most primitive; and there is luxurious vegetation, vast numbers of olive and lemon trees…" (135). Dhali appears to him to be "like a green oasis" (136).

After an audience with the Pasha in which the Pasha turned the conversation to locusts and how to protect the island from them, Friederichs and his party set out for Paphos from Nicosia (Pohlsander 2006: 137). Friederichs remarks positively upon the wooded groves on the island, as their party frequently finds resting places for their breakfasts in the midst of shady groves with running water (138). He saves some of his most positive descriptions for the western side of the island, with its valleys and mountains. "If thus far in the whole landscape the character of a desolate, burned, and treeless desert had prevailed, the picture now changed completely" (139). He notes that they had a four ride through "the most lovely valleys with an abundance of running water, luxurious trees,

and even flowers! Tall oleander bushes, in full bloom, stood wherever one looked" (139). More generally, he notes that he saw some of "the most picturesque and most lovely places, sometimes of truly surprising beauty, such as villages, tucked away in a green forest, individual houses in the valley of a river, etc" (139). As many of the following authors complain that the villagers destroy the surrounding vegetation in their search for firewood and building materials, his description provides a refreshing alternative.

VI.e. Schröder, Paul. Visited in 1870 and the spring and summer of 1873 (his letters were published in 1878). He served for the German government in Constantinople and Beirut in the 1870s through 1900s as a dragoman and consul. He was also a Phoenician scholar (Pohlsander 2004: 377). During his 1873 visit, which he began in March, Schröder notes that the island has been having below average rainfall for the previous six years, and the inhabitants were therefore emigrating in large numbers as the land could not be cultivated (Pohlsander 2006: 172). Also during his 1873 visit Schröder traveled across one of the less common destinations of the island, including in 1873 Tillyria, the remote northwestern portion of the Troodos range. The Tillyrian people even by that time had already developed a reputation – the people to whom he spoke in Lefka puzzled as to why he would want to visit the area were the inhabitants were "half-savage, dressed only in rags, and living in holes in the ground" and eating only "coarse barley bread" (174). Even more, the people "did not even know if they were Muslims or Christians" (174).[21]

Schröder states that his visit confirmed many of the descriptions he had been given. The people wore only rags, which had turned black over the multiple times they had been worn. There were no tables, chairs, or beds; he slept at the house of one of the richest inhabitants of the region in Kambos, and they could not even find a straw bed for him. Instead, the "people sleep on the ground, like dogs" (Pohlsander 2006: 174). Further, they

[21] The Tillyria area is known for its linobambaki inhabitants.

spoke an odd dialect which he could not understand, although his traveling companions could (175). More generally, the region appeared to be largely uninhabited to him apart from the few villages located back from the coast a bit to protect them from pirates, and he noted the presence of pine forests in the mountains and olive and fig trees along the Limnitis River valley (175).[22]

Schröder decided to take the five hour journey across "wooded wilderness", with the aid of a guide, to go from Pyrgos to Kambos. This trip provides him with the chance to speak about the difficulty of travel within the area. He arrives at the valley in which Kambos was located, after riding down from Varisha in a "lonely forest of young pines", and he notes that this valley is "narrow, romantic, and rich in luxuriant vegetation" (Pohlsander 2006: 176). Its "slopes are covered with vineyards, the ground for which is gained only by clearing the low forest" (176) and it takes another approximately three quarters of an hour ride through this cultivated valley to reach Kambos itself (176).

Schröder also describes Kykko Monastery, noting that hit has about 100 monks, and the mountains upon which is sits are "deep, steep, and covered with pines" (Pohlsander 2006: 177). The monastery itself is "in a hollow in the middle of the forest" (177). Schröder continues his journey across the Troodos, and he even visits the peak of Mt. Troodos, which he describes as being "quite barren; only moss and a kind of crocus, the flowers of which were poking through the snow, were growing there" (177) although lower down the summit there were mighty pines beginning at the spring Vrysi located about twenty minutes above Prodromos. It is here that Schröder includes his first negative description of the state of the forest, as he notes that "[u]nfortunately this old pine forest, all that is left of the island's former riches of forest, comes closer and closer to extinction,

[22] As seen in the main text of the dissertation, the British officials also often assumed that the Tillyria was a wild and backward area and frequently discussed moving the inhabitants, although the District Commissioner in the latter part of the 1800s tried to correct their assumptions concerning the area by noting that it was one of the top barley and carob producers, and generally a highly fertile part of the island.

since the government does noting to halt the systematic deforestation by burning the trunks" (177). According to Schröder, the inhabitants burn the trunks because they are not yet familiar with a saw (177).

Schröder also travels up the Karpas Peninsula. He notes that the land traveling north between the mountains from Yialousa was "well cultivated and fertile" (Pohlsander 2006: 188). By the time he reaches Selenia on his way to Rizokarpaso, his description has changed. "Cultivation now ceased and the rocky ground is densely covered with brush, which the Cypriots call 'woods' and in which herds of wild goats live" (189). Despite this depiction of the landscape leading up to it, Rizokarpaso itself is described as a "prosperous village" with favorable, blond haired inhabitants who maintain themselves through sericulture, as well as cotton cultivation and cattle-breeding (190).

VI.f. Seiff, Julius. Visited in January and February of 1872, account given at a lecture in 1873 and then published in 1875. He was a civil engineer (Pohlsander 2006: 202). He notes that the highest peak of the Troodos range is "rather densely forested and covered by snow during the winter", and that "numerous villages and hamlets, surrounded by luscious vegetation, are situated on the lower slopes and at the foot of the range on small streams" (203). He cites the common passage by Eratosthenes in Strabo (14.684) which states that the island at one time was completely forested before providing his description of the Mesaoria. He then notes that "hardly a single tree can be seen, except near the villages, and while in the past the whole plain probably was plowed land, the greater part of it is now covered with steppe-like pasture …[which] provides welcome fodder to the herds of sheep and goats" (204) in the winter and spring. His description of vegetation around villages is noteworthy here, as many of the authors of this time period argue that the inhabitants have destroyed the vegetation surrounding villages. His description is

even more intriguing, as he also provides the increasingly common tale of forest destruction:

> People repeatedly lamented the steadily worsening drought conditions. These are to be blamed primarily on the foolish waste of the forests, which continues in the mountains even now in truly barbaric fashion. Although there are frequent and long rains in the winter, still the heat of the sun dries up the unprotected soil again too quickly …. The present Turkish governor believed that he could alleviate the [drought] condition by drilling artesian wells ….but [Seiff] offered the opinion that the intended purpose might be better met by taking care of the woods in the mountains and by planting utility trees … in the fields, as is the practice in Italy and Spain… (204).

At that point the governor informed him that he already had issued an order which stated that every male inhabitant had to plant one tree within the year, but Seiff did not hold much hope that it would work (204).

Seiff also provides a short description of the cultivation cycle as he is traveling outside of Nicosia to the southeast. He notes that he saw

> wild, steppe-like pasture land; here sheep and goats found ample food on the fresh green, which was sprouting up among the dry stalks of last year's vegetation. The lower part of the plain, specifically the part between the Pedieos and the mounts, appeared to be under cultivation ….There is no manuring at all, since the necessary cattle are lacking; the fields are merely allowed to lie fallow on a rotating basis (Pohlsander 2006: 208).

While traveling from Ktima up to Statos in the western part of the island, Seiff returns to the topic of trees. He notes the presence of "beautiful old oak trees" and denser brush vegetation as one climbed in altitude. However, he repeatedly "found the shrubs burned over large stretches, which can hardly be attributed to chance, as my companions are wont to do, since the purpose of this destruction is not evident" (Pohlsander 2006: 216). He traveling party finally reaches Khrysorrogiatissa Monastery, and after traveling from there through Panayia, he notes that there was a "another valley of wild beauty. The steep walls of this valley were densely covered with tall bushes" between which were arbutus andrachne trees, "while on the summits slender pine trees" were present (217). They

continued heading toward Kykko through these mountains, and after several hours Seiff notes that the "mountains seemed at this point entirely uninhabited, and [they] sighted only a few goatherders with their herds wandering about on the slopes between the young bushes" (217). He further notes that they

> passed a rather extensive, but sparse pine forest with magnificent old trucks. But a large number of these, and always the most beautiful ones, had been cut into a few feet above ground and singed, while others, already fallen, were apparently not put to use and left to rot. All these trees become victims of the production of pitch, which thus far is in no way regulated by the government and is the long-lasting cause of the regrettable devastation of the forests previously mentioned (217-218).[23]

Not all of Seiff's descriptions are negative, however. As with Schröder, he notes that in the valley in which Kambos is located "extensive vineyards and occasional plantations of mulberry trees covered the slopes, and a special charm was given to these by splendid clumps of old walnut trees …" (218).

VI.g. De Montrichard. Visited in June of 1873 (published in February 1874). De Montrichard, a French forester, had been in Turkey surveying the forests before arriving in Cyprus upon the request of the Cypriot government. In his article, he immediately notes that he is just going to focus on the forests, as Gaudry and de Mas Latrie have already explored the agriculture and population (de Montrichard 1874: 33). He begins his article by describing the island's physical geography before turning to the present. The mining and smelting that occurred in the past, forming the numerous slag heaps still present on the island today, could not occur in the present in his view, as there is no longer enough combustible material to work the metal, nor wood to support the mining galleries (35). Today, he notes, the forests of the island can be found mainly on the 200,000 ha of "siliceous" land on the island, which has a total surface area of about 1

[23] This is an interesting description, as he notes the goatherder and goats among young vegetation, but does not focus upon the goats, as some authors do, but rather pitch production as the evil of the forest.

million ha. Another 600,000 ha of chalky, gypsum, and marly ground are covered with undergrowth (*broussailles*), bad pastures or completely bare, and the remaining 200,000 ha of tertiary and quaternary terrain are mainly adapted for cultivation, with two thirds that amount usually resting in fallow (36).

As with previous authors, de Montrichard notes that the classical authors praise the island's forests, resin, and general fertility. These descriptions, combined with the historian's estimations that the island had between one to two million inhabitants in antiquity whom he believes would have been living in a higher state of luxury than those inhabitants today, lead him to argue that there must have been more wood present on the island in the past than currently available (1874: 36). Based upon his calculations as well as the trees described by Etienne de Lusignan in 1572, he suggests that the forests would have held up to the exploitation until the middle of the upheavals of the Middle Ages. The trees connected with religious sites would have been managed by their priests and spared, but otherwise by the mid 16th century one could assume that large trees would already be rare near villages[24], and within the inner holds of the mountains there would be a mixture of all species of wood, such as one finds in the mountains today (37).

The depopulation which followed the Turkish conquest in 1571 gave the forests a chance to grow back some, but the over-taxation of the island, along with perhaps the actions of Mehemet Ali, were not conducive to the development of natural resources. According to de Montrichard, the island had some reprieve with the Tanzimat reforms, which replaced the tax farmers with Kaimacans with fixed salaries and encouraged the growth of population, until it reached 200,000 people, recovering from a population of only 40,000 in 1571 (de Montrichard 1874: 37). However, by that time the "pastoral

[24] As noted previously, the assumption often is that the vegetation surrounding villages would have been destroyed by the inhabitants searching for firewood and lumber. This appears to be the assumption de Montrichard makes, and it is logical. However, it is also at odds with some of the other descriptions of the beauty of the vegetation surrounding the villages. Perhaps the issue in these cases is the type of vegetation, more than merely the presence of vegetation.

customs of the Orient" had reached into the mountains, and with the introduction of those customs began the ruin of the forests (37).

To fully describe the forests today (i.e. 1873), de Montrichard argues that it is necessary to understand the rules that governed them prior to the promulgation of the new 1870 forest law. Prior to that law, all trees which had grown naturally (i.e., not hand planted) were the property of the State. However, practically speaking the State only cared about securing the timber necessary for its navy and abandoned the rest to the population to use as they desired, without any direction or control of any sort. The natural outcome of this type of unregulated usage was that all sources of wood were removed from areas close to villages or populated areas (1874: 37). Many of the forests which can still be seen today exist because they were given by the rulers to important people, or had been given to pious foundations for the maintenance of structures such as public monuments, fountains, or mosques, but de Montrichard also remarks that there are not many of these (37-38).

Looking more specifically at the steps by which the forest was destroyed, de Montrichard states that the Cypriots only use an axe in forest felling, and purposefully utilize for firewood the young trees as well as those trees which can be coppiced located nearest to their habitations. If the tree becomes too large to easily fell with an ax, or if there are no small trees nearby, the peasant will climb the tree, cut off the top portion as well as its branches, and leave the remainder standing (1874: 38). The inhabitants also destroy trees by gathering bark for tanning purposes, and then collecting resin from the now mutilated tree (38). More specifically, de Montrichard also provides an estimate of the amount of wood used on the island for a variety of purposes. In descending order of amount utilized, the list includes firewood, fuelwood for steam engines, charcoal production, resin collection, construction, exportation to Egypt of a variety of sizes of wood pieces, and house rafters. He notes that the Cypriots are loath to use a saw, and that

the fashioning of the rafters with an ax wastes an equal amount as that utilized in the production. He also describes the bark of pine trees being utilized for tanning purposes, but states that the statistics about bark collection and the profits made from it are too uncertain to estimate.

However, based upon de Montrichard's calculations, these activities are not to be blamed for the majority of the forest destruction. Rather, the grazing of the goat and the lighting of fires for it by the shepherd are the true culprits. Unfortunately, in de Montrichard's view, the new Ottoman legislation, the 1870 forest law, does little to prevent any of the forest destruction described above, since it still allows for customary use of the forest (1874: 39).

The destructive actions of the Cypriots and the customary usage rights to forest produce contained within the legal structure lead de Montrichard to suggest that a full 50 percent of the estimated 200,000 ha of potential forest area on the island must be relinquished to the Cypriots. He sees no use in trying to prevent this from happening since the inhabitants are so poor that they could not survive if these rights were taken away from them. Further, if the government did try to enforce rules limiting their usage, he hypothesizes that those actions would only lead to hatred and fires (1874: 39).

On the remaining 100,000 ha of forest area, de Montrichard estimates that there are approximately 500,000 pine trees with a diameter of more than a meter, and out of these, only 400,000 could be easily reached for exploitation, including resin collection. In terms of timber production, the Northern Range only has small scraps of forest, so the Southern Range, with its two dominant pine species, holds the most important forest stands. The density of the black pine which grows on the highest slopes is sparse, and the majority of the trees are of an old age, as the black pine does not fully mature until over 250 years of age. The Aleppo pine begins where the black pine ends and can be found as low as the villages and the herds of animals allow it. The only old trees of this species which can be

found have twisted or damaged trunks. Growing among the pines one can also find rock rose, from which ladanum can be obtained, as well as arbutus, juniper, yews, and wild olive and carob trees as one reaches lower elevations. One can also find several species of oaks (*calliprinos*, *cyprica*, and *infectoria*) as well as bay trees, myrtles, maple, elm, and plane, especially in the mountain valleys (De Montrichard 1874: 40-41). Despite mentions these various species, de Montrichard clearly favors pines, the only species he views as being capable of commercial exploitation for timber and resin production (40).

In his final pages, de Montrichard broadens his view to situate the island's forest problem and suggest solutions for the future. As he notes, the drought over the previous years has led to some fields remaining uncultivated for want of rain and to the emigration of many people. The situation is so dire that the government granted a tax relief on seed corn (1874: 41). In his mind, the drought, and more generally the overall ruin of the island, is closely connected to the ruin of the forests, so something must be done to stop this destruction (41).

To their credit, de Montrichard notes that the local government has been trying to stop the forest destruction by restricting use; for example, they have forbidden local wood to be used as a fuel in engines. However, no one has done what he thinks is most necessary, namely regulating the herds, an action which he describes as unheard of in an Ottoman country. Further, de Montrichard himself is not sure if such action could be successfully carried out, as the goats are rather numerous and wild, so collecting them could be difficult. As one solution, he recommends that a surtax be placed on goats, with an equivalent tax break on the planting of fruit trees, so that one could abandon little by little the raising of goats while at the same time turning to the cultivation of trees.[25] He highly

[25] It was this same basic principle that led to the Goats Law of 1888, with the substitution of sheep for fruit trees in this example. The experiment was not as successful as once hoped, both because of internal government pressure from the treasury, as well as because both suggestions neglect to address basic issues, such as where the trees would be planted, or where the sheep would graze.

recommends that the carob tree be encouraged, as among the agricultural resources of the island it seems to be the most favorable to develop as it can exist without any irrigation (1874: 42).

De Montrichard concludes his article by specifically highlighting the six main actions he feels are necessary to safeguard the island's forests. First, there needs to be a gradual extinction in the free-range grazing of goats, accomplished by raising the price of the goat tax. Second, fruit tree plantations need to be encouraged by reducing the tax on their products. Third, the pastures, grasses, and wooded parts of the mountains all need to be managed, while fourth, the abusive exploitation and, above all, fires in these areas need to stopped. Fifth, the areas most degraded within the mountains need to be reserved from use, while at the same time systematic exploitation of resin and of timber needs to be conducted in those parts of the mountain forests best preserved. Finally, sixth, serious research needs to be undertaken on mines and their potential for the future (1874: 42).

VI.h. Löher, F.V. Löher visited Cyprus in April of 1877 around Easter time, arriving from the port at Larnaca. He traveled over much of the island during his time on Cyprus, so much so that he himself claims that "I really believe that at that time there was not a single person in the island who had seen as much of Cyprus as myself" (1878:225). His visit garnered extra interest when Britain took over the protection of Cyprus, and a translated version of his German work was published in English with additional notes by a Mrs. Joyner in 1878.

General view of the Cypriot Environment. Löher follows many of the earlier authors in commenting upon how fertile Cyprus could be if held under the correct management. Emphasis is placed on the idea of proper management, which, as I will illustrate below, he argues to not have been practiced since the Lusignan time. The natives have been

affected by these years of poor management are indolent and slow, and consequently do not take advantage of this fertile land. They prefer to gather their food from the wild, according to him, which "will partly explain the slight degree in which the island is now cultivated. Fruits in great variety and vegetables of many kinds grow wild and form staple articles of food. It is no uncommon thing to see the Cypriotes gathering their repast as they go along and eating it without further ceremony" (Löher 1878: 81).

Cyprus has not always been like this. It was relatively fruitful until the Genoese, who were "merciless oppressors" (Löher 1878: 37) and then under the control of Richard the Lion Hearted, the island flourished again. The "slopes of the hills were covered with vineyards and orchards and the fields were sown with corn and profitable vegetables" (109-110). For three centuries Cyprus really shone with rich yields of wine, oil, silk, cotton, carob-tree, and various plants which produced dyes, as well as mining operations (194-195). Löher takes pains to emphasize that this success was not because of the Cypriots themselves, and in emphasizing this justifies foreign control of Cyprus. "This glorious change in the condition of Cyprus was effected, not by the inhabitants of the island, but by the knights, monks, and citizens who came to her from foreign countries, bringing with them knowledge, activity, and industry" (110)

After this fruitful period, the island slipped into decline during the Venetian period, according to Löher. "When the Venetians took possession of the country, it once more sank into its former insignificance, it became merely the treasure chest and the granary of a foreign nature. The entire population soon lost its chivalrous character …." (Löher 1878: 110)[26]. Locusts took over the now uncultivated areas. "A still greater misfortune was the incessant destruction of the trees and woods; the very mountains were left bare,

[26] Again, Loher either is contradictory, or this is an example of Joyner's inserts, as on page 23 he had explained that Cyprus retained the chivalrous tradition first set in place by the Phoenician Greeks until "when the Turks swept down upon her, carrying ruin and destruction in their train".

and, as a natural consequence, the rivers and brooks were dried up, so that the parched land was no longer capable of cultivation" (111). "The conquest of Cyprus by the Turks cost the island the last remnant of its industrious, enterprising, and independent inhabitants, and the blood-stained and desolate country was no longer cultivated" (196). The state of "sloth and stupidity" (111) which the inhabitants had existed until this day, getting progressively worse thanks to greedy rulers and an increasingly unhealthy climate. Today, can only rouse the inhabitants from "their apathetic slumber" (111) with foreign interference.

Löher does contradict his dire picture of the environment, however, as when talking about how fertile the island is, he notes that "wherever the earth is sufficiently supplied with moisture, a thousand plants spring up in rich profusion" (1878:197). He further states that,

> At the present day, corn is still extensively cultivated; wheat, barley, oats, and beans flourish well. Upon the mountains grow fir and pine-trees, and in the valleys we find fine oaks, ashes, orange, fig, citron, date, walnut, and a great variety of other trees. Overhanging shrubs crowd the deep dells and precipitous cliffs, and amongst them grow oleander, myrtle, arbutus, juniper, and mastic. Not less striking is the lovely carpet of flowers… (1878:197).

Finally, he describes the rivers as running rapidly during the rainy season, but then departing in the summer, leaving a thick slime when they leave. Some scholars even call the Pedieos the Cyprian Nile (1878:13).

General comments on the Forests. Löher includes a chapter specifically devoted to forests, as will become common in many of the later traveler's descriptions. The forests, according to Löher, thrived under the rule of the Greeks, Persians, Egyptians, Romans, Arabs, and Byzantines, as they paid particular attention to them. Trouble began, however, during the first two centuries of Lusignan rule, when the forests were used to supply

"enormous quantities" of timber for merchant vessel building and the fleet sent out to Asia Minor, Syria, and the Egyptian coasts (1878: 121-122).

The forests had a respite under the Venetians, as, although they were also involved with shipbuilding, "their prudent foresight" allowed them to replant when cut down, "and under their rule the forests flourished almost as luxuriantly as ever" (Löher 1878:122)[27]. Things changed, however, "…under the improvidence and carelessness of Turkish rule" (1878:122). According to Löher, the Turks would cut down one thousand trees when they only needed one hundred, as it was "easier to select the finest trees as they lay upon the ground than when towering among their companions" (1878:122)[28]. Those not wanted were left there to rot, and with each maritime disaster, the forests suffered more. "Pachas, kaimakans, and agas, year by year increased their revenues by cutting down the trees, and leaving what they could not sell, to be appropriated by whoever chose to take them" (1878:122). Not just the ruling class, but the poor as well were to blame, as since "the fine forests were under no protection from the Government" (1878:122), the poor used this freedom to live off of woodcutting. "Mehemet Ali, the first Viceroy of Egypt, gave the finishing stroke to this work of folly by permitting, or rather encouraging, any one who chose, to fell the trees and send them to Egypt to assist in the construction of ships, water-wheels, and canals" (1878:122).

Fires and resin collection are also partially responsible for the "wanton destruction" of the Cypriot forests. He places the blame for fires on "[t]he carelessness of the wandering shepherds and their families, who kindle a blaze without the slightest attempt to avoid the destruction that so frequently ensues" (1878:123). As for resin, the "dark pine" forests used to be more numerous on higher ranges according to Löher, but because of the

[27] This description of proper management of the forests by the Venetians, when in all other aspects he has presented the Venetians as over-exploiting the island and its people for all it and they were worth, is a bit confusing, except as viewed as being a way to purposefully paint the Ottomans in a poor light.
[28] This description will also be frequently repeated by later authors, who do not appear to ever consider the veracity of the statement.

Cypriots' "recklessness" (1878:123) in their attempts to obtain resin and pitch, they have "mercilessly destroyed" (1878:124) the forest, moving on to the next green spot after they have exhausted the trees in the area in which they were working.

But it is not just for the profit from timber or resin, or because of fires, that "Every village or occupied spot is remarkable for the spoliation of its surrounding timber…." (1878:122). "A sort of mania for this wanton mischief seems, actually, to possess the Cypriotes. Quarrels are of constant occurrence between the inhabitants of different villages and communities, and no better way to avenge themselves occurs to the contending parties, than to burn down and hack each others trees under the concealment of night[29]. To burn down a fine tree, merely for the pleasure of seeing and hearing it crackle and blaze, is an amusement constantly practiced by the ignorant and unreflecting shepherds as they lounge away their day upon the mountain side" (1878:124). His attempts at dissuading them from this "utter folly" were met with statements that it was "the wish of the Turkish Government", and he interprets this as meaning that the people "actually appear to consider their late rulers responsible for their own reckless indolence" (1878:125).

All is not lost however, as Löher thinks that once the value of the trees is realized, the forests will regrow. "The fertility of Cyprus is truly marvellous, and should a tract of country be left unravaged for three years, trees of every variety will again rear their heads. Even on the most arid part of the mountains, I frequently observed a fine growth of young firs and pines…"[30] (1878:123). The problem however is that these trees are not allowed to mature, as "what the hand of man does not sweep away is destroyed by the sheep and goats as they wander unrestrained about the hills"[31] (123). Therefore, all the

[29] This general trope can also be seen a half century later in Lowdermilk's (1944) writing about Palestine.
[30] As will be seen, this differs from concerns about the lack of regeneration by later authors.
[31] This is his first comment about unrestrained flocks. One might have thought that had this been as a big of a concern as he presents, he might have said more about it while traveling through the forest or speaking with shepherds. Further, he complains of sheep and goats, where generally only goats live in the mountains.

woods and the forests need to be placed under Government protection, and "every act of wanton destruction" (125) punished. The resin trade needs at the minimum to be strongly restricted. Whole tracts of country may need to be replanted, and land around villages needs to be laid out for tree plantations[32].

Löher concludes this section by stating that the Ottoman governor of Cyprus, "a most enlightened and high-minded gentleman", had same opinion "as to the imperative necessity of replanting and cultivating the Cyprian woods and forests, if the island is ever again to rise from her present degraded condition. If this is not done, rivers and streamlets will year by year dwindle away, and waste ground entirely take the place of what were once well-watered plains" (1878:125-126). "The pacha strongly urged the desirability of introducing the eucalyptus upon all the plains and the table rocks before alluded to. I inquired if this was likely to be done, but my only answer was a deep sigh" (126)[33].

Specific Descriptions of Locales within the Mountain Forests. Outside of Löher's general chapter on trees, he also provides specific descriptions of parts of the island. Löher first visits the Northern Range of mountains, but seems to remain near Nicosia. The view at San Chrisostomo monastery, just south of Buffavento, is described as being a peaceful one, with "green trees at the base of bare and rugged mountains" and olive trees and oleanders bordering a small rivulet, with the sound of sheep and goat bells tinkling below (1878:50). The area surrounding Buffavento itself was described as being formerly wooded, with fertile pastures below. Löher has to find a shepherd boy to help him climb up to Buffavento, as he states that nobody climbs that high anymore (55).

[32] "A little encouragement from their priests and schoolmasters would induce the vain and envious Cypriotes to vie with each other in the cultivation of their new possessions" (1878:125).
[33] Both the concern with the link between forests and water, and the interest in eucalyptus will be repeated in many following publications.

He then sets his sights to Mt. Olympus in the Southern Range, although he is stymied in his attempts to find information about it.

> I had determined to ascend the Cyprian Olympus, and to this end had made many inquiries concerning it. Had I desired information about some unknown and unexplored region, the few particulars I gained could not have been more vague and trifling. I could meet with no one who had ever made the ascent of Troodos, as the mountain is now called, or even learn whether the monastery of Trooditissa was situated on its summit or lay below in one of the neighbouring valleys. The Cypriotes love their ease too well to undertake such kind of excursions … (1878:78)[34].

Despite these difficulties, he sets out for Troodos, commenting upon the number of ruined houses and pastures uncultivated for ten or twenty years he passed by on the way from Nicosia (Löher 1878: 78). After traveling along a heavily wooded valley (in contrast to what he describes as "bare naked rocks above" (83)), his first stop is in Evrychou, described as "…the prettiest and most populous village in Cyprus … situated in a lovely valley surrounded by fruitful and luxuriant pastures, whilst above it tower majestic groups of picturesque mountains" (84). The people in this valley were healthy and more attractive than those of the plains; the only thing missing in this setting was the rustling sound of trees from the mountains. The soil on the mountains was to his eye fit for trees, "and yet the eye could only discover a variety of shrubs and mountain plants interspersed with a few blackened stumps" (88).

Upon leaving Evrychou, he continues going up Mt. Olympus, and is disappointed to find that the mountain is not still thickly wooded, as he had believed from a distance. Instead, there were a few groups of trees at a distance from each other, as well as "a considerable growth" of stunted shrubs, broken up by the occasional fir-tree or stump (Löher 1878: 91-92). This area appeared was free of humans to him; "Not a man or a

[34] Loher also visits Trooditissa Monastery, whose little church he describes as not being able to hold all its worshippers, so it does appear as though people knew about the monastery of Trooditissa, and there likely were people living in the area (1878:115). See below for further Trooditissa description. Also note that he does not include as negative of a description of the monastery as previous authors.

beast was to be seen either on the mountain or in the valleys beneath; it would have been easy to believe that some destroying army had devastated the mountain, and then passed on its victorious path, leaving the spot to barrenness and desolation" (92)[35].

The trees which he just expressed concern about become more numerous as they approach the summit, and he prides himself on his stamina to climb to it, which was accomplished partly by mule ride, then on foot, something which his dragoman refuses to do.[36] He then makes the questionable claim that, "It is probably many years since any one, except myself, has made the attempt. If Mount Olympus were on the European continent, hundreds would climb to its summit in the course of the year; but the Cypriotes are indolent, and all strangers visiting the island, feel the influence of its climate, and become disinclined for active exertion before the end of six months" (Löher 1878: 93).

Löher next heads to the monastery of Trooditissa, where they had set on fire two huge trees as an Easter bonfire. He leaves there to begin his journey to the Khrysorrogiatissa Monastery, which is a distance to the west. He travels through Phini, and then through a valley with trees scattered here and there upon the reddish brown mountains, much as they grow on American prairies, only these trees had a stunted growth which gave "an impression of barrenness and decay" (1878: 118). The valleys, as noted before, are described in a completely different way than the mountain slopes themselves. "From every stone and rock hung long grass and clumps of flowers, and in some places, these were entirely covered with brilliant mosses and a variety of creeping plants. Bushes of sage, marjoram, cistus, arbutus, laurel, and myrtle covered the ground, whilst oaks, juniper, and mastic trees spread their roots in all directions near the rippling waters of the stream that irrigated this beautiful valley. The soft foliage of the tamarisk contrasted

[35] This general description will be utilized several times, in various forms, over the following years.
[36] Several of Loher's guides thought that Mt. Olympus was haunted with evil spirits, and were frightened to go there (1878: 113-114).

finely with the dark branches of the pines and the silver-grey of the wild olive" (118). A variety of birds could be seen, and there was sparkling water at "every cleft and fissure in the low-lying rocks" (118). There were flowers of different types, "whilst every decaying tree stump showed a luxuriant crop of orchids and rare creepers" (118). Fig-trees were nearby (118).

Aside from the lush scene he describes, his primary complaint is the difficulty of keeping one's path while traveling, and states that they followed "the course of the stream and the goat paths, whenever it was possible…" (Löher 1878: 119). He did encounter several shepherds, whom he described as "fine fellows", who "gave me many interesting particulars of their life on the mountains" (119). "They belonged to a nomad race, wandering during the greatest part of the year about these mountains with their flocks, and sleeping in little huts roughly made of branches for this occasion" (119-120). The shepherds informed him that women and girls, as well as men and boys, lived in this manner, and the females would carry with them a "light spindle" and spin wool, which was "a work they much prefer to labouring with the hoe and sickle in the fields" (120). They also informed him that moufflon ("a species of wild goat" (120)) were rarely seen, so he imagines that they are almost extinct (120). No mention is made of the destructive nature of goats throughout this description.

Löher passes by Panagia on his way to Khrysorrogiatissa Monastery, which he describes as surrounded everywhere with almost every type of fruit tree, flourishing in a wild state and including mulberries, apricots, almonds and cherries (1878:131). When he finally reaches Khrysorrogiatissa, the "father-abbot" tells him that "For seven leagues, north, south, and west, the country …was almost uninhabited" (133). He unfortunately does not include the reason for this lack of population, although he does state that those who live within the mountains (by whom he must be predominantly referring to the monks) "love their native hills with an ardour not to be surpassed by any people in the

world" (136). He also paints a picture of this area as being a wild, uncontrolled region by discussing how robber hordes would hide out in the mountains. A particular group escaped from the Nicosia prison while Löher was at Khrysorrogiatissa, and his dragoman and horseboy refused to leave the monastery out of fear of them (133).[37]

Summary of Mid 19th Century Accounts

The sources during this period complicate the depiction of the Cypriot environment. Whereas previous authors had frequently described over-taxation and a reduction in cultivation under the Turkish period, there were few negative accounts specifically geared to the forests. Von Richter in the early 19th century provided an early example of these concerns of forest destruction, followed by Unger and Kotschy (1865) (although not so much Kotschy 1862), Schröder (1878), Seiff (1875), de Montrichard (1874) and Löher (1877). As discussed in the main text, there are frequently contradictions within some of the later accounts, such as that of Schröder or Löher, as the forests are generally described as degraded, but positive descriptions are provided when discussing specific locations. Further, there is a noticeable trend as the century progresses to describe the Ottoman government in less harsh terms by recognizing that the Pasha was attempting to prevent forest destruction. Some might take that action by the Pasha as proof that the negative accounts are accurate, but that still does not account for the multiple contradictions between general and specific forest descriptions. The obvious question still remains as to whether there was actually a change in the forest status over the preceding

[37] This depiction of the forests as being the hide-out of criminals remains a constant throughout Cypriot history. Stories are told of a group of cattle thieves, the "Robin Hood's" of Cypriot society who escaped detection for years at the beginning of British rule by depending upon the mountains and the kindness of their inhabitants (see Bryant 2003, 2004). In the 1940s, Waterer blames a group of "absconded murderers" for lighting fires in the Paphos Fire, and during the EOKA movement of the 1950s, the mountains often served as the hide-out for Grivas' men. This association of mountains and "resistance" is certainly not unique to Cyprus (see Sant Cassia 1993 for additional examples).

century, or whether the negative descriptions of these sources reflect some other variable. Several basic scenarios can be proposed:

The first is that these authors spent more time in the forest and were more observant of their surroundings than the previous sources, especially since some were trained botanists or foresters. Thus, the degradation they describe is real, and it had escaped detection by earlier sources either because they did not recognize it, or because the destruction had been fairly recent. (Although, following the accounts provided above, these authors assume that they were viewing the result of long term, multi-century degradation.)

Alternatively, these authors had a strong pre-defined view of what a forest should be – namely densely wooded with tall trees – and the Cypriot forests did not fit that description, as noted by earlier authors as well. Cyprus therefore appeared to them to be degraded, and they attached the blame for this perceived destruction to the most obvious suspects – resin collection, goatherding, or woodcutting.

If scenario 1 is correct, then it implies that forests were indeed in a degraded state by the middle of the 18th century. It does not answer why or for how long they might have been degraded, however. One could suggest that on account of droughts[38], mismanagement[39], or even the general depopulation of the island thanks to the plagues, droughts and mismanagement[40], the forests were in fact in a degraded state (by all definitions) when the travelers were on the island. The only way to choose which, if either, of the two scenarios is correct, and further to determine the how and why aspects,

[38] Several years of dry weather would have further increased the chances of forest fires, and after several large fires, with few people to work the timber, the forests might appear rather degraded.

[39] Mismanagement could also potentially include the brief period of Egyptian control, although it would have been after Von Richter's account. More generally, it could go along with the suggestion that it forced people into the mountains, although the descriptions of monasteries during this general period as being run down do not fully support that.

[40] If parts of the forests represented a managed landscape in the past, fewer people would result in a reduced management, and hence perhaps a more degraded view.

would be to find physical evidence supporting one of them, and unfortunately, as discussed in the main text, the amount of physical evidence on the forest history is slim.

Based on the data available however, it appears safe to suggest that there was not widespread forest destruction during the 19th century. There may have been localized felling, however, which can perhaps account for some of the more grim descriptions. Beyond that, the one thing that can be definitively stated about these accounts is that they indicate the potential for subjectivity in environmental accounts, and the difficulty in separating out that subjectivity from the situation on the ground. These difficulties in defining "degradation" become even more apparent in the various accounts that appeared soon after the British occupation.

VII. ACCOUNTS IMMEDIATELY FOLLOWING BRITISH OCCUPATION

On account of the increased interest in the island following the British occupation in 1878, as well as the easier preservation and availability of the manuscripts, it is possible to obtain many accounts of the island from this period.

VII.a. Wolseley, Sir Garnet. Served as the High Commissioner of the island between July 23, 1878 and 1879 and made several brief and informal observations about the island in both letters he sent to his wife as well as his journal.

As might be expected, he describes the climate as hot and dry and he is not impressed with his new posting. By August 5th, he complains to his wife that "Minutes to be written upon every subject under heaven – petitions from peasants, declaring they have been beaten and ill-treated by the police, or some one else, and a thousand other things, one after another, until my poor brain goes round like a humming-top. This [Nicosia] is a filthy hole, and I am going to clear out and encamp around a small monastery" (Arthur 1922: 31). However, he apparently finds the island's soil fertile, perhaps influenced by

experiencing the cooler fall temperatures, as on the 24th of November, he asks his wife to bring with her (she arrives in December) “some mignonette, some sweet pea, some hop, some wallflower, some heartsease seed, and a few dozen of crocus roots; anything and everything will grow here” (Arthur 1922: 33). On the 2nd of December, while expressing the hope that they will not be separated again for some time, he states that he hopes “that our mountain sanatorium may prove a great success [i.e. government camp in the Troodos]: otherwise I shall have to send you off to France or Switzerland” (Arthur 1922: 33).

He provides more detailed descriptions in his journal. Describing the country between Larnaca and Nicosia, he states that it is “very arid looking with here and there patches of cultivation and a few vineyards …[but] it is …capable of growing vines everywhere, even the hill sides if properly terraced might I believed be as thickly covered with vines as the banks of the Rhine” (Cavendish 1991: 22). He also notes the lack of water. “The whole surface of the country is furrowed up with what must be torrents in the rain and yet water is very scarce now. The wells are few, and scarcely a river or rather what is marked on the map as a river, has more than a pool here and there of stagnant water in it” (Cavendish 1991: 22).

The forests also receive his attention. “Where are the forests we thought Cyprus was covered with? This is in everyone’s mouth, yet no one can give a very satisfactory answer. Like everything else that made this country a splendid one in ancient times, the forests have disappeared under the influence, the blighting influence, of the Turk” (Cavendish 1991: 22). Unfortunately, he does not specify where the forests are still remaining or conversely where specifically they have disappeared apart from the general Mesaoria. He continues by noting the effect of the tax system on silk and cotton. “We saw, here and there, a few mulberry trees, but even the silk worm has ceased to be propagated in any large number of late years through the oppression of the tax-payer. The

cotton trade has also fallen off very considerably, although we saw a good deal of it growing" (Cavendish 1991: 22).

Several months later, in October 1878, he notes that "Lord Salisbury is going to send out an officer of the Indian Forest Department to see what can be done in planting and in protecting the little forest still remaining in Cyprus" (Cavendish 1991: 100). Finally, although Wolseley has already left the island by this point, he also provides a reference on the 4th and 13th of August, 1879, regarding the shaving of two priests while in prison under the order of Captain Inglis of Famagusta. This incident created an international scandal, as can be seen from his letters to his wife, written from South Africa about the "row" it created (Arthur 1922: 41-42). Sinclair and Vizetelly, both below, also mention it, at least one newspaper article appears regarding the injustice done by the British to the priests[41] as do later secondary sources. Although its relation to the island's forests is often brushed over in the telling of the story, the purpose for the initial imprisonment of the priests is alternately provided as that they had cut down trees illegally (either on private land or on State land) or that they had grazed goats without permission. Either way, their imprisonment indicates that forest or forest related offences were being prosecuted by the summer of 1879.[42]

[41] The newspaper *Neon Kition* on the 4th of June 1879; article title Η Καταδικη των Ιερεων (Η katadiki ton Ieron) or The Sentence of the Priests.

[42] Wolseley and Sinclair do not provide a reason, while Vizetelly suggests illegal fellings. The June 4th *Neon Kition* newspaper article refers to illegal wood cutting, while Bryant 2005 cites a June 25, 1879 article which I did not find and suggests goats. Markides (1977) notes that "Disregard of local traditions by colonial officials was evidenced very early. The following case will serve as an example. As early as 1879, a year after the British occupation, two priests were arrested by the authorities for cutting forest wood, an act forbidden by a newly enacted colonial law. The priests were treated as if they were common criminals. News of the incident triggered island-wide protests. Archbishop Sofronios sent a long letter to the colonial secretary vividly protesting the disrespect" (6). Demetriadou (1998: 137) expands upon this, apparently by utilizing the early June *Neon Kition* piece, to explain that in May 1879 priest Papa Kyriakos age 70 was accused of using a tree trunk that his son had cut to repair his well. His son had said that he cut it before the 1878 ordinance stating that he could not. Inglis, the Commissioner of Famagusta, thought that the priest was a dirty drunk and therefore imprisoned him for a week.

VII.b. Thomson, J. Visited in 1878, both a book with photos (1879a) and an article (1879b) published in 1879. Thomson was a photographer who traveled across Cyprus in the fall of 1878 so that he could take pictures and sketches to give the British citizens in the UK a view of their new possession. He provides a general description with each picture, but does not devote much time to the general question of woods, agriculture, taxes, etc. However, based on his descriptions and photos, one can develop a view of specific localities on the island.

Before moving into the western parts of the island, Thomson provides a description of the Northern Range of hills as viewed when looking down upon Kyrenia; he did not visit the Carpas. He sees that there are

> evidences of extensive and successful tillage all around him, and herds of sheep and goats, tended by their shepherds, pasturing on the hill-sides or fallow ground. Even in summer or autumn, as one makes the ascent of the hills [coming from Mesaoria], the arid appearance of the plain is exchanged for the vivid green of shrubs and pines, interspersed with flowers of brilliant hues. Here and there are olive plantations, the trees laden with fruit, and their pale leaves glistening in the sunshine like frosted silver. Some of the hill-slopes are planted out with vines, while the rich soil of the valleys below is studded with orchards, or taken up with the culture of the mulberry and cotton (1879a: 20).

Traveling west into the Southern Range, he describes the area surrounding Mt. Olympus as well as Kalopanagiotissa village. Turning first to his visit to Mt. Olympus, he states, as others have, that the road leading up to it is less than satisfactory. "[I]ndeed, in some places it is so wrecked and interspersed by scattered blocks of stone, as to force one into believing that its conveniences as a quarry have been preferred to its advantages as a pathway" (Thomson 1879a: 32).

In the context of this trip to the summit, Thomson notes the general view that Cyprus was once famous for it forests, but then states that this timber is almost completely gone from the level ground and the easily accessible areas on the island, but they still can be found in the remote regions to the east (he does not specify which regions these are), as

well as in the higher altitudes of the Southern Range. According to Thomson, many of the trees in the Southern Range, "attain colossal proportions, and the forests might yet afford an abundant supply of timber for shipbuilding purposes, were it not of far greater importance to leave them undisturbed that so they may increase the rainfall over the island, and absorb the noxious, fever-breathing gases with which the atmosphere is occasionally charged" (1879a: 35).

However,

> the ruthless hand of the rough mountaineers[43], who earn their livelihood by the sale of timber, are fast thinning even the forests which still remain, and which are everywhere strewn with logs ready to be dragged down with infinite labour to the nearest market. Only one who has witnessed the transport of a massive trunk down the mountain-sides and through the ravines can form a just notion of the difficulties that have to be surmounted by these troops of half-naked hill-men and their teams of oxen. It is, at any rate, consolatory to reflect that, but for the unremunerative [sic] character of the toil thus required, the island would long ago have been totally denuded of its trees (Thomson 1879a: 35).

Thomson further notes that "many of the finest pines are annually destroyed merely to supply resin and pitch. Even the women take part in this pursuit, and they may be seen ascending the highest trees, lopping off the branches as they mount upwards, until at last only the bare trunk is left, ready to be fired near the root, and overthrown" (1879a: 35). In order to restore the forests to their former perceived glory, "the most stringent laws for their preservation must be made, and, when made, put in force. Fortunately … the supply of saplings is abundant, and these might be utilized in replanting the waste land to be found in great quantities on the hills and plains of the island" (35).

A thunderstorm, with torrents of rain and hail, broke out while he was on the summit, and he devotes a sketch to this storm, as well as a picture of what are meant to be the remains of an old wall "now overgrown with shrubs" (Thomson 1879a: 37) made of

[43] He describes these mountaineers as being robust and living in villages such as Prodromos, Moutoullas, and Kalopanagiotissa (36), although, as will be seen below, he does not mention any woodcutting while describing Kalopanagiotissa.

stones which looked as though they had been carried in from elsewhere. When the storm cleared, he was able to see that "Pines loomed once more in giant proportions through the mist…." (37). Continuing on to Kalopanagiotissa village, he states that it has a population of 500 people, "whose principal occupation is vine culture, although olives, silk, and cotton also figure among the products of the place" and they live a hard and poor life, as evidenced by the prices at the market (30). Interestingly, there is no mention of woodcutting as a profession.

To reach the village, once must ride for four hours from Levka along "precipitous cliffs, mountain-sides, and the bases of frowning crags" (Thomson 1879a: 29) on a winding path following the stream. There are several villages located on the banks of this stream, and the inhabitants use it to irrigate their orchards and vineyards [this is the Marathasa Valley]. "The surrounding hills are covered to the summits with grape-vines, while the valley below is devoted to the cultivation of fruit-trees, for these grow hereabouts to great perfection, being nourished by the alluvial soil that is washed down during the rainy season from the hills" (29).

Finally, traveling further south west and out of the mountains proper, he discusses the village of Trashibiola [Trakhypedoula] which is on summit of a ridge to the east of Paphos. The inhabitants there had gathered to discuss their goat problem. The goats had eaten some of the villagers' crops (Thomson assumes that the herdsman had fallen asleep). It is not stated to whom the goats belonged, and Thomson also notes that the people could have simply used "some of the brushwood which grows abundantly on the waste-lands" (1879a: 42) to fence in their fields and keep the goats out.

Several points can be drawn from these scattered descriptions. Although the winter of 1878-79 was reported to be exceptionally dry[44], it appears as though the mountain

[44] "The first year of the new administration has been marked by a minimum rainfall that has caused the destruction of all crops dependent upon the natural water-supply of seasons…." (Baker 1879: 344).

streams in the Southern Range, and the river leading out into the Kyrenia plain in the Northern Range, still had enough water to keep the land, in his view, lush and green. Further, the waste lands are clearly described as bearing brushwood, but Thomson does not take the next step of discussing the inhabitants' potential use of that brushwood. As for the pine forests themselves, the pines on Cyprus grow rather slowly, so if there are ones of colossal proportions, these pines must be rather old, and there must be a rather large number of them if he thinks that they could supply enough wood for shipbuilding. This implies that deforestation has not been as recent or as intensive in certain areas as at times presented. His comments about the difficulties of the transport of the logs downhill is also telling, although he is one of the few to suggest that they used oxen, rather than mules to transport the logs. Although he still argues that the island is in general deforested, he does recognize that this difficulty in transport reduces the amount of deforestation which is feasible[45].

Like Baker, as well as all of the official foresters later accounts, Thomson emphasizes the importance of trees for climate, a concern which is missing from some of the earlier authors. However, his comment that there are abundant saplings goes against what many of these same foresters would have us believe. Unfortunately, he is not clear as to what he defines as "abundant" nor in which specific part of the forests he saw these saplings.

VII.c. Special Artist and Correspondent, S.P.O. Visited in the fall of 1878 when the Illustrated London Times sent reporters to Cyprus to describe the new acquisition. Thomson writes a report for one of the paper reports, but the others are all attributed simply to a "Special Artist and Correspondent"[46].

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[45] And indeed, this difficulty in transport is still an issue close to 80 years later, when a firm employed to investigate ways to investigate the economic benefits of the forest noted the unproductive costs in felling and transporting logs from mountainsides at an average slope of 70 degrees (Hummel 1954).

[46] Hill (1952:293, ftnt 2) suggests that he was St. Leger Algernon Herbert, the private secretary of Sir Garnet Wolseley.

In September this reporter travels from the coast near Ayios Theodoros over to Komi Kebir on the other side of the center mountainous area.

> Soon the landscape improved, and the scenery became more rural and less desert. The fields, villages, and farms were more frequent; the watercourses were not entirely dried up, and wherever moisture remained in their beds thickets of lovely oleander bloomed. The flocks of sheep and herds of cattle were larger, and thriving better. The olive-trees, too, were more abundant. Altogether we had entered a richer district. We crossed the line of telegraph which joins the submarine cable to the eastward. We were almost up to the hocks of our animals in marsh and water in one of the gullies. The mere sight of anything like water, or even moisture and vegetation, is pleasant to the eye after a continued course of desert and sunburnt plains (Martin 1999: 22).

Upon arriving at Komi Kebir, they

> accompanied our host to his gardens outside the village. Melons of different kinds, maize, bringals, chilis, and other vegetables were in profusion here, as where-ever water for irrigation is procurable. But the people are too poor to procure the means of digging wells and tanks, or to employ the labour of mules and horses requisite for the machinery of the water-wheel to raise the precious fluid. Outside Khumi Kebir there are plenty of vineyards and quantities of olives; and here was the only place where we observed hedges forming regular lanes. At this village we first came across stone mills for crushing the olive, and the wooden rude screw presses with which the coarse bags of crushed olives are squeezed to make the oil exude – a very crude process (Martin 1999: 23).

After leaving Komi Kebir, they head toward Kantara Monastery. The range is described as being quite jagged, and the road nothing more than a goat path (Martin 1999: 23) “We diverged here and there, where the precipitous rocks forced us to push through thickets of myrtle, and pines of small, stunted growth (*Pinus Laricio*), and we often had to find paths for ourselves” (23). They found one aged and very ragged monk at the monastery, whose complaint was that the herdboys not only throw rocks at him but allow their flocks to graze on the grounds, and even upon the roofs of the monastery buildings, in which there were holes to prove it (23). Descending from the monastery into the plains was quite difficult. They had to follow zigzag paths, “which in the rainy season must be simply the beds of torrents filled with boulders and rolling stones” and were so

steep that they had to lead the mules down them, all the while being exposed to full sun with no shade (24).

From there they traveled on to Kythrea, and upon riding into its "groves and avenues" they were

> delighted to see green leaves, luxuriant vegetation, and hear the sound of many streams, which spring from the abundant sources at the foot of Mount Pentedactylon. We were astonished to see such large buildings rising through the trees by which they are surrounded. In the principal place of the town, where the cafés are, grow plane and sycamore trees of some height and girth, almost large timber, the first umbrageous trees of any respectable size we had yet seen in the island (Martin 1999: 25-26).

Mulberry trees are also common in the area, and the inhabitants cultivate cotton and sesame (26).

VII.d. Brassey, Baroness Annie Allnott. Visited in the fall of 1878 (published in 1880). Brassey traveled with her family on a well equipped boat throughout the region.

During their stop on Cyprus they travel from Kyrenia to Kythrea. She describes the landscape as a sandy stony plain, which showed no signs of fertility for about two hours, and then they began to pass through "vineyards, cotton-fields, and pomegranate, olive, and orange-tree plantations, till we reached the house of a rich Armenian…" (Martin 1999: 37). As with the other travelers, she also notes the importance of water. "The effect [of the spring] produced is magical, trees and crops of all kinds flourishing luxuriantly under its fertilising influence. The village of Kythraea itself nestles in fruit-trees and flowering shrubs, and every wall is covered with maidenhair fern….The current of the stream is used to turn many mills…" (Martin 1999: 37-38).

Brassey also has an encounter with Wolseley (who privately expressed dislike of her in his journal) on November 15 near Morphou. In the ensuing conversation, she makes the following statements about forests.

> Sir Garnet seems to have been well pleased with his ride and with the country he passed through, though he had come to the conclusion that the forests and the game with which it was said to abound were alike a myth. There are fine trees, but they are few and far between, and in no place do they grow close enough together to form a real forest, or anything more than occasional patches. As for the game, I believe that there is hardly any in the island (Martin 1999: 42).

Her party also travels to Kykko, where, after climbing a little hill about the monastery, they could see over the whole breadth of the Troodos. “It was rather like looking at one of the raised model maps one sometime sees, so numerous were the spurs of the mountain, stretching in every direction, and so endless the ramifications of the valleys. Below us were vineyards, now all dry and barren, for the grapes have long since been gathered.” (Martin 1999: 43).

VII.e. Butler, Lieutenant-Colonel W. F. Visited in late 1878-early 1879 (published in 1880). Butler records his visits to many parts of the world in his book, with the first four-fifths of it devoted to western Canada, California, Afghanistan, and South Africa.

Butler is concerned about the damage goat-browsing might do, and he vividly describes a scene of goats grazing near Kyrenia. They were being driven in for the evening, but

> Here and there a goat could be seen in the gnarled fork of some old olive-tree, stretching forth his head to grasp a leaf. The lower branches of the trees had all been cropped off long ago; but goats were standing on their hind legs vainly trying to reach some pendant branch. One in particular, a little longer than his comrades, did succeed in catching between his teeth the lowermost twigs of a bough. Long experience had doubtless taught him that if he attempted to pull down his prize all would be lost; his efforts were, therefore, directed to maintaining a balance upon two legs and holding on by the bough until assistance came to him. This it quickly did. In an instant twenty goats were ready to lend a helping foot; out of these some half-dozen succeeded in getting their teeth into a twig, then all lent their weight together to the pull, and down came the olive-bough to the ground, to be instantly devoured by the rush of animals which settled upon it (Martin 1999: 50).

He ends the description with a jab at the Turks – "The advantages of pillage upon co-operative principles were here plainly apparent. Had the goat learned them from the Turk, or was the goat the tutor to the Turk?" (50)

Turning away from goats, he comments upon the greenness and luxuriousness of Kythrea (Martin 1999: 50). He also describes the landscape between Peristerona and Litheronda as "hills scantily covered with small pine-trees" (53). He journeys to Mt. Olympus, and on the way "lofty pine-trees rise on every side", but the top of the mount is white and "bare of pine-trees" (54). In his journey back down the mount he suggests that goats commonly frequent it, as "[a] general goat-track seemed to pervade the entire mountain" (55). He next heads toward Kykko, and describes the path along the summit to the monastery in the following manner. "[T]he sides of the hills descend so steeply into these valleys that the stones go rolling from the feet of the mules as we jog along; but the sense of the steepness of the declivity is lessened by the pines and arbutus-trees that grow around – the arbutus only on the north faces of the hills." (Martin 1999: 57).

Once at Kykko, Butler describes himself as helping the Kykko monks translate a return for taxation which they were presented in English. He finds the scene humorous, as the "passing traveler" they had initially translate the document had mistaken the word "pitch" for "bitch". "The brethren were amazed at finding themselves taxed for ten thousand okes of bitches" (Martin 1999: 58).[47] As for the scenery around the monastery, Butler is quite dramatic in his descriptions. He appreciates the vast stillness in the morning, a "stillness deepened by distant murmur of mountain stream and the softest whisper of old pine-trees" (58). However, this picture of tranquility does not remain long, as he states that unfortunately, "that wonderful old forest" is now nearly gone,

> that glorious growth which has given decks to Turkish galleys for three hundred years, that forest for whose destruction Greek and Turk have for once joined

[47] While many travelers note the damage to the trees by pitch production, this amount of 10,000 okes seems rather high.

> hands upon the handle of the felling axe. Burned, hacked, slashed at, barked, and wounded, some grand old survivors still stretch forth their gaunt arms, as though they asked for mercy from the destroyer; and still, when the night hides the wreck that man has made, the wind-swept song of their sorrow is wafted in unutterable sadness over the ruined land (58).

On a less dramatic note, Butler indicates that at least some walnut trees have escaped destruction, as he complains about being served walnuts steeped in honey as a meal, and proceeds to suggest that this type of food might be why the Turks are seen as the sick man of Europe (59).

Butler also presents a strong view as to the role of the English, which is worthwhile to note because this view likely affects some of his descriptions above. His opinion can be summarized as follows:

> And now what is to be the future of this island? Can it be redeemed from ruin? Yes. By us? No. By its people? Yes. The Turk ruined; the Greek can renew. Let us beware of attempting to lead or to direct a people who, when their first sensation of surprise is past, are bound to hold us in ridicule and aversion….There is a singular delusion pervading the English mind that we can civilise and improve a people. It is just the one thing we have never been able to do (Martin 1999: 61).

VII.f. McCalmont, Hugh. Served as the aide-de-camp of General Wolseley in 1878-1879. Memoirs published in 1924. McCalmont is not pleased with the acquisition of Cyprus (he thinks the British "had been right well sold" (Martin 1999: 72)), nor with being in Cyprus himself, nor with his job, but nonetheless he does offer a few tidbits of information about the island's climate. He notes that the winter was mild, although on December 6th, one of the troop members died of fever[48]. He also provides a good example of the need to take descriptions with a grain of salt, noting that although Wolseley tried to

[48] McCalmont also sarcastically questions the abilities of the troops, stating that "at the funeral one of his 'firing party' managed to shoot another fellow in the eye. So we are getting on pretty well in our small community" (Martin 1999: 72).

present to his staff and the world that the climate of Cyprus was fine, he still quietly took quinine every day (72).

VII.g. Kitchener, H. H. Worked in Cyprus between 1879-1883. This information about the landscape of Cyprus comes from a piece Kitchener wrote for Blackwood's Magazine in May of 1879, in which he obviously is trying to paint as rosy of a picture as possible for the island. This is in sharp contrast to the role Baker and Dixon (discussed below) assign to themselves in their books, which rather is one of pointing out the difficulties on the island.

As further details on Kitchener, who later gained fame for his military exploits in the Boer War, he was assigned to survey and map the island of Cyprus in 1878. He had just finished an assignment mapping Palestine, and he had high hopes of creating a very detailed survey of Cyprus in order to show his skills and help propel his career (he was concerned that survey work would not excel him as quickly as military work). Unfortunately for Kitchener, his highly detailed map required large sums of money to create, and, since the Home Government was strictly limiting the amount of money available to the administrators on Cyprus, the Cypriot High Commissioner did not feel that he had the funds to continue supporting Kitchener's survey, and sent Kitchener and his team back to England by May of 1879. The High Commissioner (Wolseley, a military man) however, was called away from Cyprus himself in 1879 by the military, and the new High Commissioner (Biddulph) felt strongly that a proper survey needed to be completed of the island, and thus recalled Kitchener in March of 1880. Kitchener worked in Cyprus, serving as the Director of the Survey Department and the Director of the Lands and Registration Department until 1883, at which point he left the island with the final touches on the survey as yet unfinished (SA1/13245). By 1885, however, the map was published.

Kitchener describes the island both in general and specific terms, with the overlying aim always being to show how it could be developed into a very prosperous holding. The island in general has many different types of landscapes, "The bare treeless plain may be changed in a very short space for pine forests of magnificent trees: instead of sand and dust, we trample on bracken-fern by the side of rills and torrents running in steep gorges" (1879: 57). The soil is generally very fertile, able to grow a variety of crops with the proper irrigation, which could be obtained from the mountain rivulets as well as by digging under the surface of the plain some 18 to 20 feet (5.5 to 6 m)[49] (58).

Kitchener states that many places on the island could be changed "from barren wastes to their former fruitfulness" through "enterprise and capital" (1879: 58), and notes that roads are especially needed[50]. One example he provides of this is the Akamas (40 square miles), one of the Sultan's holdings, which he says was recently offered for sale but did not sell because prospective buyers did not offer enough money for it (only £200, but he thinks that it would have sold for just a little more). It has slopes suited for vines and it also has springs, including one powering a mill. "The hills are now covered with scrub, and are only used as grazing-ground for flocks of goats. Small portions of the plain are cultivated by a few shepherds, who also collect firewood and ship it from the shore"[51]

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[49] As will be noted later, most attempts by the government in the ensuing years to find water by digging, led to only limited success.

[50] He suggests that the natives do not care themselves about better roads, and would likely destroy them if built for them. However, if British colonists arrived, Kitchener suggests that the same events might occur as did in Lebanon. "The English colony goes up from Beyrout to some village in the hills for the summer months: a road where there was none before is soon made by the natives; the houses are improved; rents rise; a hotel is started, and a thriving active community takes the place of a torpid village" (58). If a few colonists arrived on Cyprus, "the natives would soon make roads where they were needed, and the example of activity would speedily infuse energy into the sleepy inhabitants when they saw the advantages of it before them" (58).

[51] As many of the early colonial officials create a false dichotomy between the shepherd and the farmer, this statement is refreshing as it recognizes that the two categories are not exclusive, nor is wood cutting. However, this statement is also clear evidence of why the government had such issues with the goatherds. Kitchener gives no thought to the idea that the goatherds might have a claim to graze in that land, or that they may need to graze there out of necessity and that the products they supply might form an integral part of the economy. Instead, he presents the Akamas as essentially being unused in any important sense, and just waiting for a buyer.

(58). With some capital, the slopes could instead be covered with pines, and the low plains with groves of fruit trees. Further, there likely is mineral wealth in this area, which, if found, would also provide a profit (58).

Not all areas of the island need this much improvement, however. The Kyrenian Plain is a "narrow strip of very fertile reddish soil" located between the shore and the Northern Range, and is covered with carob and olive trees (Kitchener 1879:60). The land of the Mesaoria is very fertile where the top crust has been "broken away by denudation" (60), the plain of Morphou is fertile as well, and in the lower hills of the Southern Range, one comes "on rushing streams of water, groves of oranges and lemons" (60). This setting makes Lefka, at the mouth of the valley, a noted orange-growing area. The hills around Lefka "are full of mineral wealth, and clothed with mighty pines; broad and fertile valleys lead from them to the plain below" (60).

Going up the valley from Lefka, the villages look to Kitchener like those in Switzerland. The hills along the valley are covered in vineyards (1879: 60). A narrow and steep path leads up to Mt Olympus, from where one can look out over the island. To the west, the mountains grow "wilder" and the pine forests larger and denser. This part of the country is little explored, but in it "is a mass of intricate valleys and steep slopes covered with trees. There are streams of water, and the ground in parts is clothed with luxuriant bracken-fern under the lofty pines. Though much injured by burning for resin, they are still fine trees[52], and there are a good many young ones growing up to refill the spaces that have been cleared" (60-61).

To the south are the Limassol and Paphos districts, with hills "covered with scrub and sometimes with trees" (Kitchener 1879: 61). One can clearly distinguish where the white chalky limestone gives way to the igneous rocks of the Troodos, and in this area there are

[52] These statements show a clear distinction between the views of a forester and a non forester. To the forestry officials, those trees are ruined.

vineyards on all slopes. In the Paphos district especially, the valleys are large with streams of water to irrigate their lower steep slopes. The hills are green, "the grass forming a perfect turf" with horses and cattle grazing on it that were driven down from the "parched plain to the north" (61).

Besides these landscape views, Kitchener also describes the animals on the island. Goats and fat-tailed sheep are present all over the country, but especially in Limassol and Paphos districts. They provide a good supply of milk in the spring, much of which is then made into cheese and exported (1879: 59). Donkeys and mules are the most common pack-animal, although ponies and a few camels are also used. Cattle are small, and only used for pulling ploughs or carts. They are not milked or eaten (60).

VII.h. Sinclair, H. M. Worked on the island between 1878 and 1886 (account published in 1926). Sinclair was in charge of organizing much of the military supplies when the Occupation first occurred and setting up the Governor's house, and he then later became the private secretary of Biddulph, after turning down an offer by Kitchener to join his survey (Biddulph paid better). As with many of the early government employees, he felt that there were many instances of money being misspent and unprepared and untrained men being in charge of things[53]. Further, the Home government was not overly happy

53 For example, he recounts a story about the shaving of the priests which is also mentioned by Wolseley and by Vizetelly (below). Sinclair stated that an "ardent young Commissioner" had imprisoned 2 priests, and ordered them to be shaved without knowing it was a bad thing and the Turkish Zaptiehs performed this with much zest. He was asked about this in Syria by the Vali of Damascus, and also points out that spread quickly in Cyprus too. This took place at Famagusta, but that next morning he was stopped by villagers twenty-five miles from Larnaca and fifty miles from Famagusta and asked if it was true (Sinclair 1926: 98). He also suggests that the government only made serious attempts to do anything about locusts (because they initially did not want to devote the money) after a swarm of locusts came to the government house garden (Sinclair 1926: 127). As one final example, he tell the story of a man with a large sum of money at his use who was willing to undertake work at the salt lake, but the Colonial Office had said that they had to be put out a public tender for 3 months first, and by time this was done, the man had found a different use for his money and nobody else had come forward. "A *faux pas* of the Colonial Office may be mentioned here to illustrate how hide-bound allegiance to routine may injure a new country such as Cyprus then was" (129).

with the amount of money spent on Cyprus, especially since it was not clear where all of the money was going.

Sinclair describes the first winter as dry, with the eucalyptus and mimosa planted around the governor's palace struggling to stay alive. The Pedieos, which he states only ran in the winter and the spring, was "scattered over with plantations of olive, carob, cypress, and other trees….In the spring this valley was carpeted with the vivid green and yellow of the cornfields and with brilliant and sweet smelling flowers" (Sinclair 1926: 125)

Sinclair also describes the location of military camp created at Troodos after the disaster of the first summer on the plains. The location was at 6000 feet on a broad plateau which was shaded by huge scattered pines, while the mountain slopes below it were "thickly wooded with the tall stately pines and various Mediterranean shrubs besides a peculiar kind of ilex with a very dark shiny leaf lines with a bright orange, fluffy reverse…" (Sinclair 1926: 112).

Sinclair describes Kykko as being "in the heart of the western mountains which were marked 'unexplored' on the old maps" (1926: 138). He complains about how steep and precipitous this area is. "This region, practically uninhabited, was the home of the moufflon, a breed of wild sheep peculiar to Cyprus, where they still survived in respectable numbers in spite of the war waged on them by the shepherds, who used every unsportsmanlike trick…."[54] (138). It was "…also the last home of the Cyprus cedar, an indigenous variety, of which no great number remained…." (138). It was the time of the annual pilgrimage (August) when Sinclair first visited Kykko, and he states that it was like a fair, and that "[t]he whole mountain side was covered with camping families,

[54] Sinclair does not seem to be fond of the natives hunting at all, as on a later page he notes that a distraction to his dull work was hunting hares. However, these were scarce "owing to the poaching proclivities of the natives" and the scent was sketchy unless in wet weather or early morning (141). In other words, he appears to be under the impression that the hunting of hares by the natives for food was bad, but the hunting of hares by him for sport was good. Quite colonial of him!

though it was so steep that each person had to dig out a little seat for himself to prevent him from slipping down to the valley beneath" (140).

Skipping ahead several years to 1882, on account of the occupation of Egypt, Cyprus (true to one of its initial reasons for occupying) was chosen as a staging ground, and the government was told to expect 10,000 troops, whom they were to keep out of sight in the mountains, using at least 1000 donkeys to move all the necessary supplies. "…camp sites were measured out, no easy task on a barren, rocky, forest-clad shoulder of a huge mountain" (Sinclair 1926: 130), but in the end, that number of troops did not appear. Instead, 4000 troops from Malta arrived, whom the English government provided with supplies, "including a quantity of our best ponies" (131). One might question what Sinclair means by barren and forest-clad.

As a sidenote, Sinclair also played a role in the spelling of map names. He explains that Kitchener "was depending on the chance transcription of his English subordinates, without much attention to the etymology of the words in Greek" (1926: 144), so Sinclair himself had the Greek bishops send in the names of villages and monasteries and then made a correct transliteration of them into English and submitted them to be the official spellings, "but on its reference to Kitchener he was furious with me for interfering and for some months refused to speak to me, even when out hunting while I was master of the hounds!" (145).

VII.i. Brown, Samuel. Visited during the winter of 1878-79, account published in 1879. He refers to vegetation infrequently, although several points can be gleaned from his work. As with many of the authors, he is anti-Turk. On account of the three hundred years of Turkish rule on Cyprus, "everywhere ruin, decay, desolation, the population decimated, and the fruitful land became a wilderness" (Brown 1879: 20). He believes the Cypriots could be improved through education from their lazy and indolent state, and

describes them as being in a partially civilized state on account of the fact that their farmhouses are not set within their fields, but rather within the main village (15). He argues that although Britain took control of the island for selfish reasons, it still could be used to show the East just how good of rulers they are (15).

Brown also illustrates the difficulties in inferring environment from traveler's accounts by noting that many people "after reading the *couleur-de-rose* descriptions of newspapers and pamphlets in vogue during the early days of the occupation" (1879: 5) expected Cyprus to be an earthly paradise. However, those on the ground realized that this was not the case, and within nine months of occupation had developed a view of the island as a "fever-stricken wilderness" (3). In his mind, neither of the accounts is correct, and the truth lies somewhere in the middle. In contrast to the sources from previous centuries, Brown does not talk highly of the island's potential fertility, instead stating that the task of the British is "to work judiciously to improve what is now a comparatively unremunerative property" (4).

Echoing Sinclair's account of the first winter, he notes that the rains had not yet started even in December. Consequently, everything was "bare, arid, treeless, waterless" (Brown 1879: 5). Once the rains set in, however, the "plains were in a few days green with wheat and barley, while short grass sprang up in the pastures and moorlands, affording herbage to great flocks of sheep and goats; and the ground was thickly studded with wild flowers …" (6). While the winter of 1878-9 "was remarkable in the Eastern Mediterranean for its unusually high temperature and deficient rainfall" (7), the winter of 1877-78 had been exceptionally wet[55] (29).

In general, Brown describes much of the island as being covered with large groves of carob and olive trees (1879: 7), although the central and eastern plains were different in

[55] Kitchener (1879) uses the fact that the winter of 1877-78 was so wet to argue that the troops were hit with an unusually bad fever season that first summer and fall, and that in the future it would not be so bad.

that they had no trees. A stretch four miles north of Limassol even reminded him and the Commissioner of Limassol of pastoral counties in England (7). With irrigation, he thinks the island could be favorably developed. "[T]he future advancement of Cyprus depends chiefly on obtaining an abundant and constant supply of water for irrigation….the rainfall [on the plains] is frequently insufficient" (24). As proof of this he notes that between 1870 and 1879 the grain crop has failed twice and the crops were far below average in three more years, so over ten years there had only been five good harvests (24-25). He strongly recommends constructing reservoirs to solve this rain problem (26); "…the Pidias [Pedieos] is after all but a small stream…." (31). In support of his statements, he uses Kythrea and Lefka as examples of villages, one Greek and one Turkish, which benefit from irrigation. In these villages, he states that fruit trees, including orange, lemon, citron, shaddock, apricot, almond, and pomengranate abound, as well as prickly pear, olives and vines (9).

He further notes that the hill district above Limassol is especially suited for vineyards, and much progress has been made with them since the British removed certain restrictions which the Turkish tax-farmers had in place to increase the taxes owed (Brown 1879: 10). Unlike some of the early officials[56], Brown also recognizes the benefits of the native mudbrick house and its roof made out of rafters, reed matting and a foot of earth (13). He states "that the houses of the country…are in every way preferable and better suited to the climate than the wooden buildings erected by the English Government in Cyprus" (14).

As with the previous authors, Brown notes that only a small portion (one tenth in his opinion) of the island's cultivatable land is actually cultivated. There are a number of reasons why agriculture is so neglected. As noted by others, these include the taxation

[56] Several of the early forest officials viewed the native construction style as being wasteful of wood, and wanted to force the inhabitants to alter their building style.

system, as well as the natural laziness of the population, who keep far too many feast, fast, and holy days (1879: 23). Further, part of the problem can be found in the fallow system employed, as the inhabitants do not even attempt practicing crop rotation (24). He suggests that the population of the island today may be estimated at around 200,000, which is about one third or one fourth what the island could actually support (11). Finally, as an underscore to the importance of Kitchener's topographic map, which had been recently suspended when he was writing to work, Brown notes that a geological and topographical survey is pressing for the island, as "no map of Cyprus exists with even an approximation to accuracy" (32).

VII.j. Vizetelly, Edward. Lived in Cyprus between August 1878 and February 1882. Published his recollections in 1901. Vizetelly considers himself to be a journalist, and he was one of the editors of several of Cyprus' new newspapers post Occupation. However but he also could be fairly described as an adventurer and an opportunist, especially on account of the large variety of jobs he takes while in Cyprus.

As with Brown, he notes that many of the descriptions of the island which circulated in England around the time of the Occupation were false.

> My faith is too great in the intelligence of my fellow-countrymen…to suppose [that these stories of gold, coal, precious stones] … were generally believed. But, none the less, it is a fact that at the time of the occupation of Cyprus, every one in England imagined that the island under British rule would have a great future; and swarms of our fellow-countrymen packed up their traps and flew to the new possession (Martin 1999: 76).

As an example of the number of people swarming to the island, he notes that the Greek Consul (he had been in Athens prior to coming to Cyprus) delivered twelve hundred passports for Cyprus in just one week (77).

Petitions play a large part in understanding the Cypriot environmental history[57], and Vizetelly suggests that petition writing was actually quite a lucrative business based upon his personal experience. He had met a Greek who could speak several languages but could not write any of them.

> This amiable son of Hellas lost no time in pointing out to me that a mint of money could be made out of the Cypriots by writing petitions for them to the Government. A vast number of people, he assured me, had something to say to those in authority, some grievance to bring to their notice, some favour to ask, and did not know how to make themselves understood. Under the Turks they went to a Turkish or Armenian scribe, who drew out petitions for them (Martin 1999: 79).

Vizetelly and his friend presumed that it was likely that the Cypriots would follow the same approach with the British as well, which they did. His Greek partner would find the customers, which was not difficult as the "Cypriots are a discontented lot of people, ever on the growl. Before the occupation was six weeks old they imagined that they had some cause for complaint against the new order of things" (Martin 1999: 80). He would then write the petition, and they would split the profits in half. Vizetelly's account of petition writing, if accurate, provides a window into how the multiple petitions regarding the forests arrived at the government, as well as a potential window into the type of business oriented person writing them. Since many of the inhabitants could not read, one does have to wonder whether the petition writers always remained true to the desires of the petitioner, or whether they embellished them to suit their particular interests, whatever those might have been.

Vizetelly also provides insight into what he considers to be the normal diet of the Cypriot, and thus the normal staples produced on the island while lamenting the fact that the British had to maintain their own customs, down to morning baths, Liebig's extract, and Bass and Co. beer, no matter where they were stationed. For Vizetelly, the normal Cypriot diet contains none of the above beverages or spreads, but rather "goat and pilaf,

[57] Petitions play a large part in Cypriot life in general as is supported by Wolseley's complaints above.

salt anchovies and olives, tomatoes and stringy cheese, cucumbers and fig-peckers…onions and garlic, water melons and purple grapes, mastic and thick black wine" (Martin 1999: 80-81, 82). Vizetelly may have been associating with more well-to-do Cypriots than some of them based on the prominent mention of goat meat.

Vizetelly also describes the native house construction, focusing on its roof. As with other British officials in the area, he does not appear to understand the insulation purposes behind constructing the roof with sod on top. "The worst part of the building proved to be the flat roof, emerald in spring, with an abundance of green barley and grass that afforded pleasant pasture to some goats and an Easter lamb, which were hoisted up there every morning and taken down at night" (Martin 1999: 95).

Vizetelly's view of the island as a whole is certainly not glowing, as he describes it as "a wretched little island, three-quarters of which are a barren, uncultivable waste" (88)[58]. The fertility ascribed to it by others is overstated, he argues, as on the one quarter of the island which is not a barren waste only the vines flourish, as the corn crop invariably fails cause of prolonged drought in spring and summer, and further, any cotton which grows is poor. "Two things are essential to bring prosperity to the place: a much more extensive cultivation of the vine, and storage of water as in India and elsewhere, so as to permit artificial irrigation when required" (Martin 1999: 96).

As with Sinclair, Vizetelly also provides examples of colonial ineptitude, but he also notes that the inhabitants were wise enough to realize when they were being scammed, and they successfully resisted it. His examples focus upon over-exuberant commissioners (Larnaca and Kyrenia) and he reports instances of illegal taxes as well as a slightly incorrect version of the events surrounding the jailing of the priests and the shaving of

[58] He has neither fond memories of Livadhia (a village within Larnaca District in which he stayed) or the Greek Orthodox church, as he states that at one point when he was very ill and many thought he would die, his landlord brought in a priest to perform the last rites, who tried to rob him of his possessions, which were in a sock under his pillow, in the process (Martin 1999: 85).

their beards (Martin 1999: 85-87, 90-91). In discussing the instance with the priests, however, he does provide several telling, and insightful statements.

> At the time we took Cyprus over from the Turks a wiseacre had succeeded in convincing the authorities that the place had formerly been covered with forests, which the ruthless Turk, for the purpose of greedy gain, had cut to the ground. As a fact Cyprus was never covered with forests. Sir Samuel Baker and other authorities have settled that point beyond question. But under the erroneous belief that a vast range of forests had formerly existed, and that owing to their destruction the island annually became a prey to drought just at the time when it should have rained, the Government enacted an Ordinance absolutely forbidding the felling of all trees whatsoever, whether private or public property. So that no one might cut down a tree, even in his own garden, without exposing himself to prosecution (91).

Besides offering sarcastic comments on petition writing and the governing skills of commissioners, Vizetelly also turns his sights on the court system, specifically on the role played in the Larnaca court by the Assistant Commissioner, Mr. Robert Fisher, who was a barrister-at-law. Mr. Fisher evidently had a fox-terrier which he had brought with him as a pet, and which in turn had become rather fat and followed him everywhere – even into the Tamiz Court, where the dog had its own assigned chair beside its owner, who was also joined by a Turkish Cadi and a Greek Cypriot judge (Martin 1999: 91). As Vizetelly describes the setting, "Fisher, who understood neither Turkish nor Greek, was equally ignorant of the Ottoman law. But anxious to do his best, he insisted on the proceedings being translated to him by his Armenian interpreter" (91). The scene in the courtroom because of these various languages and translators was therefore generally mayhem. Fisher and his interpreter would talk in English, the Turkish Cadi in Turkish, the Cypriot judge in Greek, while the lawyers would speak in Turkish when addressing the court, but would argue between themselves in Greek, and the witnesses and audience could be talking in English, French, Italian, German, Greek, Arabic, Turkish, or Armenian. "Suddenly, amidst this babel of tongues the pie-bald dog, disturbed in his sleep, would give three or four sharp snappish barks. Then rising and having a good

shake before seating himself on his haunches, he would emphasise his canine expression of discontent by a loud peal of barking which he interspersed with playful growls, and not until his master had several times ordered him to lie down would he curl himself up on his chair and resume his slumber." (92). "Amidst such entertaining surroundings was meted out some of that 'substantial justice,' against which I have naught to say, that Sir Garnet Wolseley on leaving the island proudly proclaimed the Cypriots had enjoyed during his term of administration" (92).

VII.k. Savile, Captain. Visited in 1878, published account, which is essentially a summary of the earlier consular reports meant to help guide the colonial officials, in 1878. Savile immediately differs from some of the previous accounts by absolving almost all rulers prior to the Ottomans of responsibility for forest destruction.

> From historical accounts is also appears that the ancient rulers of Cyprus, whether Greeks, Persians, Egyptians, Romans, Arabs, or Byzantines, all gave particular care and attention to the cultivation and protection of the fine forest trees which then contributed so materially to the prosperity of the island; consequently, not only did stately pines and other trees cover the whole of the mountain ranges, but the entire plain was also clothed with a dense mass of forest (Savile 1878: 89).

More recent rulers unfortunately were not all so conscientious. The Lusignans are singled out for criticism as there was damage under their rule during the 13th and 14th centuries. "…the first serious attack … upon the luxuriance of the Cyprian forests; at this period ship-building was carried on to an enormous extent, and no pains were taken to replace the trees used for this purpose" (Savile 1878: 89). The Venetians, though, are provided with a slightly better history. "The Venetians, who came next, were also great shipbuilders, but had sufficient foresight to undertake a certain amount of planting …"(89).

As noted, however, the full blame is saved for the Ottomans. "[I]n 1572, Cyprus fell under Turkish rule, and then at once commenced the ruthless destruction which, were it

continued much longer, could only end in the conversion of the island into an arid waste" (Savile 1878: 89). At the time he was writing the book "…except on the Olympus range in the south-west part of the island, and on some of the slopes of the Cerinea and Karpas mountains, the island is now wholly denuded of forests, and so bare and treeless is the Messaria plain at the present day, that it is by no means easy to appreciate its former condition" (89). As stated, Savile argues that the blame for this destruction can be squarely placed on the Ottomans. "Cyprus has undoubtedly in many ways suffered much at the hands of her recent owners, but in no particular is this fact more clearly evidenced than in the utter destruction of the forests" (89).

Savile then turns to Löher's account to flesh out how "the improvidence and carelessness of the Turks have caused the disappearance of the forests" (1878: 89). More trees were cut than were needed. "[I]f a hundred trunks were wanted, a thousand were felled, it being slightly easier to select the finest trees when lying on the ground than when upright, the best were then taken away, and the remainder left to rot where they lay" (89). The trees were viewed as a source of income, as "…the pashas, kaimakams, and agas have increased their revenues by cutting down the trees, and leaving those which they could not sell to be appropriated by whoever chose to take them" (89). The Ottoman Government provided no protection to the trees, so the poorer classes would also utilize trees to form a large part of their income by selling the whole tree (for smaller trees), or just the bark and branches (for larger trees)[59]. Further, the temporary occupation of the island by Mehemet Ali (1832-1840) was especially damaging to the forests, as shipment of timber to Egypt was not only permitted but encouraged (89).

Savile (1878) continues by noting that, "[b]ut, in addition to all this, a very large proportion of the forests have been destroyed simply through either carelessness or

[59] One thinks of Gordon's (1955) comments about a forest economy on Cyprus. Thirgood (1987) utilizes this quote as well to suggest destruction, although it could also be utilized to suggest a managed forest, likely with underlying rules and regulations.

wanton mischief" (89-90). Part of this carelessness or wanton mischief included, as Löher points out, fires set by various villages as revenge to other fires, or even set just to watch them burn by the "the ignorant and unreflecting shepherds" (90). Furthermore, following Löher again, the forests destroyed owing "to the foolish and reckless manner in which the tar burners and resin distillers carry on their business" (90)[60]. Savile also turns to Gaudry's account from the mid century. "Gaudry says that if a peasant wishes to sow some grain up in the mountains, he simply burns down the trees which stand on the spot, and their ashes serve to enrich the soil for a few years" (90), and then the process is repeated[61]. On top of all this, in the few cases where pine regeneration does occur following the ravages above, the plants usually are "destroyed by man" or "irreparably injured by the sheep and goats which wonder at will amongst them" (91)[62] [63].

To be successful at protecting the forests, Savile suggests "that all the existing woods and forests should be put under the immediate protection of the government, and their culture and general management entrusted to efficient persons; every act of wanton destruction should be punished, boundary lines round the villages should be fixed, and restrictions placed upon the present trade in resin" (1878: 90). Although it will take many years and much money to restore the forests, "in the end, however, it cannot but prove renumerative, not only as regards the actual value of the timber itself for manufacturing

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[60] Note, however that neither resin nor tar appear as separate import/export during 1860s.

[61] One may assume that Madon in 1880 was following a similar impression when complaining of fitful cultivation, although Madon focuses on vineyards, not grain. The idea of sowing grain in the mountains is intriguing. There have been threshing floors identified in some of the old herding villages (see Given 2000), but the steepness of the mountain slopes would tend to suggest it was not a lackadaisical practice and terraces would likely have been necessary for a successful attempt.

[62] As will be seen throughout later chapters, not all of the officials initially have a clear view of the grazing patterns of sheep and goats. On several times, one official has to correct other officials about assumptions that sheep graze in the mountains, which on Cyprus they did not.

[63] Note the progression of blame in this account. The overarching blame should be placed on the Ottomans, but within that blame he turns to the elite selling the wood for profit, the poor selling the wood for profit, the occupation by an Egyptian ruler creating serious harm to the woods, and then finally states that a large proportion was destroyed on account of carelessness or mischief, including fires (vengeance or for cultivation), improper resin collection, and sheep and goat grazing. One is left with the feeling that he chose to blame everything he could think of, leaving the reader to wonder which one of these issues is the key issue, if any.

purposes, but also on account of the influence which the existence of forests would have upon the climate" (90).

Savile makes repeated references to the importance of trees for water throughout his chapter concerning the climate of Cyprus (1878: 71-81). Under the subheading "[d]roughts arising from scarcity of trees", he notes that that there are droughts every fifth year, and that

> [i]t is a recognized fact, especially in sub-tropical regions, that where the mountains are clothed with wood, rains fall frequently and moderately, the air is kept cool and the land is fertilized. But, when the forests are cut down, there are long intervals of drought followed by torrents of rain, which wash the vegetable mould off the slopes into the plains, leaving on the one hand bare rocks, and on the other, miasma-breeding marshes (78).

The dry summer months are not unexpected on account of Cyprus' geographical position, "but the occasional lack of rain during the winter months may perhaps be attributable to the present treeless condition of so great a part of the island" (78). Savile further notes that apart from increasing water supplies, trees can also play a sanitary role. "That the planting of trees, and the careful preservation of such woods as still remain, would soon work wonders in the way of sanitary improvement, is the opinion of many medical and scientific men; several competent authorities have suggested the planting of *Eucalyptus globulus*, which has been attended with great success in Algeria and other places" (79).

More generally, Savile also takes pains to emphasize that the island is a potentially good acquisition. Thus, while droughts are an issue, an issue which planting trees can fix, water in general is not really lacking on the island. Rather, it is wastefully used.

> It would perhaps be more accurate to assert that hitherto there has been shameful waste and loss of water which would have been of the highest value both from a sanitary and an agricultural point of view, and that this waste has, even in ordinary seasons, frequently led to the supply becoming for a time limited; but with a watershed like the Olympus range traversing the island from West to East, and with the several abundant springs which have already been enumerated, it is difficult to believe that with proper precautions, water could be really scarce; and, indeed all reports … which have been received since the arrival of the British

> troops, agree in the statement that water is plentiful, and of good quality (1878: 79).

Savile further notes that "[t]he neglect of the river beds has been already noticed; not only is the water allowed to break through the banks and run to waste" (79), but the "unskilful manner" of the farmer's attempts to direct the water onto their land results in great water loss. "Tanks, to be filled by rain-water during the winter, might with advantage be constructed in several localities" (80).

In concluding his description, Savile states that "[i]t appears, on the whole, that the climate of Cyprus is not really so bad as has been asserted by many people who have based their opinion either upon a short visit to the island during the worst season of the year, or upon mere hearsay" (1879: 80). As a precaution against any fevers the island might have, he recommends that people steer away from too many cucumbers, melons, and fruits (80).

VII.l. Baker, Sir Samuel. Visited from January to mid-August of 1879. Baker had already traveled and written accounts on several other countries before he visited Cyprus during spring and summer of 1879, staying at his campsite near the monastery of Trooditissa for more than three of those months (1879: 455). Because of this time spent living at the Monastery, he is one of the presumably better informed sources[64] as other travelers only spent a week or so. As will be seen, Baker's descriptions of the forest vary widely depending upon whether he is discussing them in general, in the context of basic landscape scenes, or discussing them in particular in the chapter which he devoted to them. Not surprisingly, his tone is much more reactionary in the chapter which he specifically devotes to them.

[64] With the exception of the forestry staff, although Wild did only spend 3 months on the island, as well as perhaps the exception of Unger and Kotschy in the mid 1800s and Holmboe in 1904.

General view of Cyprus. Baker assumes that Cyprus had been prosperous, and that it must have had artificial irrigation in order to make it prosperous (1879: 346). The rainfall is often uncertain, and although there are some perennial streams in the mountains, the sandy soil absorbs all the water before it reaches the low lying villages. The Cypriots still have some knowledge of how to transport water, as they successfully employ chains-of-wells, and the British government should encourage this practice by forming a special commission in each district to report upon it (1879: 350-351, 358). He also provides several descriptions of irrigation channels in comments directed more towards the difficulties of traveling. His party had hoped to cut cross-country across the Mesaoria, "but a glance at the intervening country showed the impossibility of moving the vans through the miles of green crops which were nourished by innumerable watercourses, each of which must be levelled before we could advance" and "although the plain appeared flat and without natural obstacles, the ground had been completely traversed by deep trenches for the purpose of checking and conducting surface water to the fields in the event of a heavy shower" (115).

According to Baker, the government should also look into water-wheels to ensure a steady supply of water. As he explains it, the debt of the farmers is a result of the uncertain rain and often-ruined crops, but if the farmers could be guaranteed water, then this problem would be solved (1879: 357). Baker does not make many specific suggestions for crops, besides suggesting that the cultivation of cotton should be encouraged (1879: 395).

Like Brown (1879), Baker devotes much of his writing which deals with agriculture to the policies of the outgoing and incoming government. Along with the lack of water, he views taxes as the reason the island is not better cultivated. The Turkish administration had an "arbitrary and vexatious system" of taxation, "which remains unchanged and is still enforced by the British authorities" (1879: 379). These "unfair and irritating

restrictions" (379) keep not only the local population from cultivating the land, but also will prevent Englishmen from becoming landowners in Cyprus. Putting it in slightly more expressive terms, "If the object of the government were purposely to repress all horticultural enterprise, and to drive the inhabitants to the Nebuchadnezzar-like grazing upon wild herbs, the present system would assuredly accomplish the baneful end" (379-380).

As can be seen, Baker implicates the English government (due to its inactivity) along with the Turkish government for these problems. He strongly believes that more should be done by the British administration, even though they have occupied Cyprus for less than a year at this time. As he states,

> England has acquired the reputation of the civiliser of the world; it is in this character that we were expected to effort a magic change in the position of Cyprus; instead of which we have hitherto presented a miserable result of half-measures, where irresolution has reduced the brilliant picture of our widely-trumpeted political surprise to a dull 'arrangement in whitey-brown' …which is the pervading tint of the Cyprian surface in the absence of artificial irrigation (359-360).

Or,

> It is almost amusing to contrast the criticisms and advice of the various British consuls who have for many years represented us in Cyprus with the ideas of modern officials. There can be no doubt concerning consular reports in black and white, and equally there can be no question of existing ordinances under the British administration; but what appeared highly unjust to our consuls when Cyprus was under Turkish rule, is accepted as perfectly equitable now that the island has passed into the hands of Great Britain (395-396).

However, he does take care to emphasize that he is not blaming individual authorities for this lack of progress. Rather "I denounce the arbitrary and oppressive system of *Turkish* rules, which, although in some instances mitigated by our administration, still remain in force, and are the results of the conditions that were accepted when England resolved upon this anomalous occupation" (398) (his italics).

Baker also takes care to soften his criticisms by noting that the money simply is not there to do much of these things, a point several of the earlier authors note as well.

> The fact is that, as usual, the English government has been hoodwinked in their hasty bargain. The island can pay its way, and, if free from Turkey, would become most prosperous; but we have inherited an estate so heavily mortgaged by our foolish Convention, that the revenue is all absorbed in interest, which leaves nothing for the necessities of development. The commissioners of districts are over-worked and ill-paid, their allowance of interpreters is quite insufficient to secure the necessary check, and their position is incompatible with the importance of their official status. There is no money for any improvements, and the boasted surplus will just suffice for the payment of salaries and the absolutely necessary items of carrying on a government more in accordance with the position of Greece or Denmark than with the historical reputation of Great Britain (Baker 1879: 440).

Thus, Baker presents a picture of an island still functioning under poor agricultural policies, with limited funds (although he does admit that it has been a tough first year with the drought and the uncertainty of their stay affecting commerce (1879: 400)). As already seen with Sinclair and Vizetelly, this view of an uncertain beginning will become a common theme through the next several authors, although of course this uncertainty is replaced with stories of success as the years progress.

Specific descriptions of the forest. Many of Baker's specific descriptions of Cypriot forests come from his journey to Trooditissa Monastery[65] and his subsequent stay there. Like Löher, he passed through Phini in his mountain journey. He describes Phini as being located in a vine-covered dell, with the houses built into the steep slope in such a manner that one could utilize the roofs as terrace steps (1879: 305-306). After leaving Phini, he describes a waterfall with groves of green trees, and presents a positive description as he continues his journey up the slope. He states that he could look down "upon the rounded

[65] In contrast to some of the earlier descriptions of Trooditissa (e.g. Unger and Kotschy 1865), Baker does not specifically single it out for being any filthier or in a more decrepit state than the other monasteries on the island. However, he does mention that the monks benefited from the wisdom he was able to teach them about managing their gardens.

tops of various trees, including the rich verdure of planes, which skirted the banks of the hidden stream", and "the view became very beautiful as we ascended" with

> pines rising from an undergrowth of beautiful evergreen, including the fragrant tremithia, the light green foliage of the arbutus, with its bright red bark contrasting sharply with the dark shade of the dense and bushy ilex. The mastic was there, and as we increased our altitude the *Pinus laricio* and *Pinus maritima* varied the woods by their tall spars, beneath which a perfect garden of flowers almost covered the surface of the earth; these included the white and purple cistus, dogroses, honeysuckle, and several varieties unknown to me. Among the ornamental dwarfs were a quantity of Sumach, which is an article of export from Cyprus for the use of the tanner and dyer (307).

Baker's traveling party finds Trooditissa monastery to be "snugly nestled among splendid walnut-trees in the dark angle of the mountains… [with a] rich foliage of plane-trees, walnuts, mulberry, and other varieties" (1879: 308) as well as irrigated terraced gardens which "were overcrowded with fruit-trees, including filberts, mulberry, pears, apples, figs, walnuts, plums; the only grape-vine was represented upon the trellis; the position was too high for apricots" (311). The water for the irrigation came from the three springs of water surrounding the monastery (311). From his height at the monastery, he could look down at a "dense foliage of rounded mulberry-tops and the fruit-trees of the gardens within the gorge, while exactly in our front, a hundred yards across the deep ravine, was the rocky steep of the mountain side, densely clothed with ilex and arbutus, until the still higher altitudes banished all underwood[66], and the upper ranges of Troodos exhibited a surface of barren rocks clothed with tall pines and cypress, 2000 feet above us" (314). The loose, sharp stones of these higher slopes (above 4500 ft or 1372 m) ruined all of his best hunting boots (326, 374).

On closer inspection, Baker describes the transition into these high and stony slopes in the following manner. There were

> ravines and pine-covered steeps upon either side …. surface vegetation became scanty; the rocks in many places had been thickly clothed with the common fern

[66] This description is still fairly accurate today.

> growing in dense masses from the soil among the interstices; the white cistus and the purple variety had formed a gummy bed of plants which, together with several aromatic herbs, emitted a peculiar perfume in the cool morning air [remember this is July 2]. These now gave place to the hardy berberris which grew in thick prickly bushes at long intervals, leaving a bare surface of rocks between them devoid of vegetation (1879: 370).

This hardy berberris is also described as a type of dwarf prickly broom, which the goats ate eagerly, and which would grow horizontally into such a dense mat that could uproot it and use it as a gate to keep animals out of gardens (367-368). He also blames "the constant grazing of the numerous herds" for the stunted juniper found in association with this type of vegetation (368).

Baker immediately set to work building a camp for himself, including a little garden, as "An Englishman's first idea is improvement …." (1879: 311). Along with his tent, he built a shack, utilizing the bark of mulberry shoots in place of cord to tie the wood pieces together. Since the monastery did not have silkworms at that time, the mulberry trees had not been being pollarded annually, and therefore there were many shoots over seven to nine feet in length (313-314). The soil was such that he could plant tomatoes, cucumbers, melons, and beet-root in his garden, and he had to fence it so that neither goats, nor donkeys, nor pigs could enter it (312-313). He also bought his own small flock of sheep from the lowlands, which he had a shepherd girl watch about whom more will be said below (326).

Besides working in his garden and writing his book on Cyprus, Baker states that he spent his time exploring the mountain slopes around the monastery with his hunting dog, including making a trek to the summit. However, the "barren rocks" which made up the slopes above 4500 feet after the undergrowth had stopped below would get so hot in the summer that they would not hold a scent, so hunting was difficult. The primary game was hares, but moufflon, or wild sheep, also existed, although hunting them was prohibited by the Government as the natives would hunt during breeding season and kill ewes and

therefore risked killing too many of them (in the government's mind) (1879: 368). They were said to be moderately numerous in the "very large area of the mountains perfectly wild and unoccupied to the west of Kyka monastery, extending to Poli-ton-Khrysokus" (369), although there were said to be no more than perhaps fifteen of them in the Troodos range (369). Despite these limited numbers in the Troodos range, Baker felt that the government needed to kill some of the rams, which he thought outnumbered the ewes and he therefore took it upon himself to go hunting for rams on top of Mt. Olympus, where they had been sighted before. He does spot two of them, but cannot get a clean enough shot to kill one.

Apart from the hassle of the sharp rocks, the higher mountain ridges did provide good views of "the numerous villages surrounded by vineyards snugly clustered in obscure dells among the mountains at great elevations about the sea" (368). Prodromos, at 4300 feet, could be distinguished by the numerous walnut-trees and the large amount of cultivation surrounding it (368). To the west, "the mountains rose in dark masses…covered with pine forests, which at this distance did not exhibit the mutilations of the axe" (370).

As for the peak itself, "There were no trees upon the rounded knoll which forms the highest point of Cyprus: these must have been cleared away and rooted out when the ancient [Venetian] camp was formed, and the pines have not re-grown, for the simple reason that no higher ground exists from which the rains could have washed the cones to root upon a lower level"[67] (Baker 1879: 373). He could faintly hear the military band practicing, although they were invisible "about a mile distant among the pine-forests" (373).

[67] This description of the top of Mt. Olympus being bare has now been repeated through several centuries and as discussed in the main text, sketches and pictures over the last century support it.

Baker also notes, with very little foreshadowing of this view in his earlier comments, that in his hike he had noticed a "terrible picture of destruction throughout the forests of Troodos" (1879: 374). Specifically, he notes that "near the summit, the pines and cypress were of large growth, but excepting the cypress, there were scarcely any trees unscathed, and the ground was covered by magnificent spars that were felled only to rot upon the surface" (374). He states that he will devote an entire chapter (which will be described following this section) to this topic of forest destruction, as he thinks that it "is one of the most important subjects in the modern history of the island" (326).

Before turning to his chapter on the woods and forests, though, one must take note of the description Baker records of the shepherds. Baker is one of the few authors of this time who describes shepherds in anything other than the usual derogatory remarks (perhaps an indication of his non-forester role), although his descriptions are not without contradictions. The shepherd girl in charge of his sheep was an almost five year old who belonged to a shepherd family living 250 feet (76 m) above the monastery (or approximately 4600 feet above seal level). There were seven children in this family, two older boys and five younger girls, with an age range of 19 to 5, and they all were competent shepherds. Their house was a rough log-hut on a spur shaded by tall pines, and the children were "remarkably well-mannered" and never misbehaved in Baker's eyes. His almost five year old shepherd ("Vathoo") would drive out his sheep at 4 am, return them at 8 am to avoid the sun, and then drive them back out again from 4 pm until 7 pm (1879: 326). He describes the mother of these children as being often occupied in making goat's milk cheese (halloumi), which was a popular export (374).

Although Baker never suggests that the family mismanages its herds (or his own sheep for that matter), in a different section of the book (described below), Baker complains of the damage done by goats. Along with Baker's concern that goats as well as other animals will ruin his garden, the monastery gardens themselves are described as often

being extremely troubled by goats[68] (317), although it is not clear to whom these goats belong (whether to the monastery, or to the shepherd family, or to the monastery and watched over by the shepherd family, or some completely different owner). This idea of goats damaging the forest never enters into his idyllic description of this shepherd family, and tellingly, he never once suggests that they discontinue their livelihood or that they should move elsewhere.

Further, Baker seems to periodically fall into the accepted stereotype that the mountains were wild and uninhabitable (apart from the monasteries), even though he clearly recognizes that the shepherd family lives above him, and one would assume that other shepherds live in the area as well (especially since he later accuses them and their goats of damaging the forest – but not eating pines!). For example, he makes comments such as "[a]mong these wild mountains, where no dwelling of any kind exists, it has always been the custom after the melting of the snows in early spring to pasture the numerous flocks of goats, which are at that season driven up from the parched herbage of the low country to the fresh herbs of the cooler altitudes" (1879: 318). It perhaps could be that he is referring to permanent dwellings, as certainly temporary dwellings exist for the part of the year from May on that the shepherds spend in the forest.

Baker's chapter on Woods and Forests and general forest descriptions. As mentioned above, Baker, although talking about the valleys in such positive terms, nonetheless states with very little advance warning that there is a "terrible picture of destruction throughout the forests of Troodos" (1879: 374). This "deplorable aspect of the otherwise beautiful mountains was occasioned by the wholesale and wilful destruction of pine-trees, which is the Cypriote's baneful characteristic" (326). Further, "The position at the moment is as

[68] The goats must not damage the garden too intensely, as he describes them as being lush and heavily utilized by the monastery's visitor (380-381). He also states that "The monastery gardens of Trooditissa at the close of July exhibited the great fruit-producing power of the soil and climate at this high altitude, but at the same time they were examples of the arbitrary and vexatious system of Turkish taxation, which remains unchanged and is still enforced by the British authorities" (379).

follows. Throughout the entire mountain range there are not 5 per cent of pines free from mutilations" (333). Because of this level of destruction, he devotes an entire chapter to this topic of forest destruction, as he thinks that it "is one of the most important subjects in the modern history of the island" (326).

The importance of forests and trees, according to Baker, lies in their ability to protect the soil from the sun and heat like an umbrella would protect a person from rain. By keeping the rocks and soil cool, they allow condensation to form, which in turn produces rain "It is well known that trees exert a direct influence upon meteorological phenomena" and "…in all countries that are expected to develop agricultural resources, the due proportions of woods and forests require special attention" (1879: 328).

On Cyprus, the main tree types are oaks, pines, cypress, plane, olive, carob, and tremithia. Arbutus, myrtle and mastic are also present, but Baker thinks their stature is so short that they cannot be classified as forests[69] (1879: 331). Turning more specifically to each tree type, there are three varieties of oaks, "but large park-like timber of this species is exceedingly scarce…they are only sufficient to prove the destruction that has befallen their race. It is most probable that the oak was largely exported for ship-building; but as an available forest-tree it may be said to have disappeared" (328-329). *Quercus ilex* is most common, but it is rarely seen "as a forest-tree" because the natives utilize it to make charcoal. Those examples that do exist are very hardy and usually in the form of dense bushes about 8 feet high (2.4 m) because of "continual hacking", although he has seen in some remote areas examples which are in the shape of timber and stand about 40 feet (12 m) (329).

The two main types of pine he describes as pinus laricio and pinus maritima. They are both rich in tar and turpentine. Stone pine is also present but very rare, and the natives eat

[69] Here again is another example of the variety of ways in which the term "forests" can be described, a distinction about which it is important to be aware.

its seeds when present, such as at Platres (Baker 1879: 329). There are also two types of Cypress – the dwarf, which covers the Carpas district (329), and the "fragrant species" which grows in the Troodos Range (330). The Cypriots call the dwarf variety "aoratu"[70] (330).

Plane trees are usually found in ravines, and do not grow to a large size because the natives utilize the straight young stems. Also, elm, ash, maple, walnut, mulberry, peach, apricot, apple, pear, filbert, fig, plum, cherry, orange, lemon, and pomengranate are common in ravine-type settings, although they are not indigenous (Baker 1879: 330).

"A considerable portion of the low scrub-woods of the Carpas district" (Baker 1879: 330) is formed by olives, and he thinks they should be grafted in their natural position as the people do with the carob. Carob needs to "receive the special attention of the government, as its produce should be extended to the utmost limit of the capabilities of the island. If the wild trees were grafted wherever they are met with, whole forests would quickly be produced with a minimum of labour, and vast tracts of rocky soil, worthless for other cultivation, would be brought into value, at the same time that the surface would be covered with much desired vegetation" (331)[71].

Baker emphasizes that the remaining forests are meeting destruction everywhere, even in the highest altitudes, where "the Cypriote has penetrated with his unsparing axe" (1879: 333). "There is no sight so exasperating as this uncalled-for destruction; it is beyond all belief, and when the amount of labour is considered that must have been expended in this indiscriminate attack upon forest-trees *that are left to rot upon the ground* where they have fallen, the object of the attack is at first sight inconceivable" (333).

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[70] There is much confusion about this word throughout the colonial period. Aoratos is a common term which refers to most of the species of Juniper on Cyprus.

[71] The Forest Department wavers repeatedly as to how to deal with wild carob and olive trees. Note that his use of the word "forest" is curious here, especially after his earlier comments about whether trees could be considered forest or not.

> The sight of a mountain pine-forest in Cyprus would convey the impression that an enemy who had conquered the country had determined to utterly destroy it, even to the primaeval forests; he had therefore felled, and left to rot, the greater portion of the trees; but finding the labour beyond his means, he had contented himself with barking, ringing, and hacking at the base of the remainder, to ensure their ultimate destruction (333-334).

Baker also states that he has covered the greater portion of the mountains on the rough native mule-paths which run throughout the mountains, and "in all cases I have been overcome with anger and dismay at the terrible exhibition of wanton and unwarrantable desolation" (1879: 334). "If a hurricane had passed over the country and torn up by the roots nine trees out of every ten that composed the forest, the destruction would be nothing compared to that of the native Cypriote, who mutilates those which he has not felled" [72] (334). "Magnificent trees lie rotting upon the ground in thousands upon thousands, untouched since the hour when they fell...." (334).

The woodcutters creating such damage are very talented; "[t]he work of the axe is almost as neat as that of a cross-cut saw"[73] (Baker 1879: 334). The trees are felled at about four feet from the ground, so the woodcutter does not need to stoop while he swings his axe (334). In such a way, the woodcutter cuts around the tree with such straight swings, so that only two or three inches of wood remain in the center, "which in the absence of wind remains balanced" until felled by a wedge (334-335).

Baker suggests that so many trees are felled out of incompetence and laziness. A large pine will be felled for the use of only five or six feet of it out of which to make a wooden trough for water "or to feed his pigs" (1879: 335). Or, a large pine will be cut down, and then trimmed, when only a single pole is needed (335-336). A whole tree is used to make a single beam or plank (336). This happens often, "and great piles of chips are continually met with in the forests", so often that he was surprised that the military did

[72] Much of this now often repeated lines are also found in Löher, as well as some of the mid century German sources. Thomson, as previously noted, might provide clues to understanding some of his rather outlandish statements.
[73] The forestry officials disagree with that statement.

not utilize the wood lying around the forest to supply the planks and rafters for their huts rather than transporting the materials for the military huts up into the mountains (336). Larger trees will be partially cut while standing in order to determine the quality of the inner wood, and then left damaged in that manner if the tree is not wanted. Trees are also felled for tar, but in this case, they first are cut with a deep incision in order to determine if resin will run. If it does not run, the tree is left standing and "nearly every tree is thus marked" (335). If resin does flow, the tree is cut down, the branches removed, and the remaining trunk cut into sections which are placed into a kiln and burned, with a special gutter designed to collect the tar which this process produces (335). Finally, there are also fires, both accidental and malicious, which commonly spread when the ground is dry and covered with pine needles[74] (336).

However, in the face of all this destruction, Baker suggests that there is hope. It would not take much to stop this destruction of the forests. Highlanders from Scotland, accustomed to clambering up and down slopes, could be hired who would live within the forests during the summer and could also serve to protect the game (1879: 336). Since the "Cypriotes are easily governed"[75] (337), a few severe public examples of the punishment meted out to the forest "destroyers" would be enough to deter others (337).

Just protecting the woods, however, is not enough. The forests must also be extended. Baker notes that there had already been much in the English newspapers about this – "superficial advice suggested by numerous well-meaning correspondents who were utterly devoid of practical experience in tree-planting" - and it was determined that Eucalyptus trees, especially Eucalyptus globules, would be the savior of the island. Seeds were therefore distributed to the district commissioners to be planted, "as though these overworked and ill-paid officers were omniscient" and were highly trained in horticulture

[74] Baker is one of the first travelers to mention fires, although he does not provide specific examples of them.
[75] Vizetelly likely would disagree with him.

(1879: 337). They were not, of course, and consequently "all these attempts ended in failure"[76] (338). The government should have appointed a gardener whose only task was to raise trees, adapted to the soils and altitudes of the island, for plantation work (338). Baker speculates that the only reason this was not done must be a lack of money[77].

Baker also provides insight into how he considers the natives might view the situation. In his mind, if they do not understand why there needs to be such stringent rules about tree cutting, they may decide that the government was trying to gain some "selfish advantage, and that the forests were eventually to be leased to a company"[78] (1879: 338). They need to be convinced that this is not the case, and they will be convinced that this work is being done "for the welfare of the island" (338) if they see the government begin tree-planting on a large scale.

There will be difficulties in doing this, Baker notes, the most important of which are the large numbers of goats, "that would utterly destroy certain varieties of young plants" (1879: 339). However, goats do not eat the native pines, "even when in their earliest growth" (they are "invulnerable to the attacks of goats" (339)), and these pines are "so ineradicable" that if the woodcutting was stopped in the existing forests, within "ten years there would be masses of young trees too thick for the success of timber"[79] (339). Therefore, the pines, as well as cypress, should be relied upon in this replanting process (339-340).

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[76] The lack of training of the District Commissioners may not be the only reason, if a reason at all, behind the failure of the eucalyptus. Rather, as Madon (1930) notes, the cold winter of 1878-79 killed off many of them. (Madon also questions the widespread use of eucalyptus in general.)

[77] The government does hire a gardener in 1879, and Madon is quite unimpressed with his knowledge or efforts in 1880. He dies of fever before he can be fired (SA1/2098).

[78] Ironically, at times, various products of the forest are leased to an outsider. Hutchinson and his control over bark collection in the 1880s and Ohnefalsch-Richter's control over tremithia seed collections during the same general period are two examples. Further, government fellings for their own use and for their own recreation (such as felling trees to improve a practice shooting range) likely did little to encourage the natives to think positively about the forest policies.

[79] Baker's faith in the natural regeneration of pine is not supported by later experiments.

Cork oak could also be introduced, as the "climate and soil of the Troodos mountains would be highly favourable" to it[80]. Spanish chestnut should also be introduced for use as pillars in wood construction (Baker 1879: 340). Walnut grows quickly once planted – walnuts planted at Trooditissa monastery 20 years ago are now the size of 50 year old walnut trees in England – and both its wood and its fruit are valuable and profitable (339-340). In sum, it would be simple to preserve and extend the woods and forests in the mountainous districts of Cyprus provided that capital[81], common sense, and experience are followed (341).

The other portions of the island would need to be treated in a different manner if they were to be replanted, but Baker does not necessarily think this should be done. Noting that although "it is the fashion to accredit every portion of Cyprus as tree-bearing in its early history" (1879: 341), he does not think this is so. "[T]he hard bare surface of the denuded cretaceous hills could never have borne timber", and the Mesaoria plain must have been used for cultivation in order to feed the people, not for forests. The ancient forests, therefore, only existed where there are still remains of them in Baker's time, and the portions of the mountains which now support vineyards must have originally been forests (341-342). Having identified these areas as the ones eligible for being restored, only those areas which are not cultivated and which are useless lands should be replanted. Also, all owners of land should be required to plant carobs, mulberries, or other fruit trees on their land, something which could be done on all types of land, with water and energy (342-343). The natives will state that the Turks taxed fruit-trees excessively, and therefore they do not want to plant any with the risk that the British might leave them to the Turks again, and, just as importantly, they are very poor. The way to deal with these problems will be to recognize that Cyprus must remain in England's hands, or else

[80] Madon specifically states that this is a bad idea.
[81] A primary component which was not forthcoming, as discussed in the main text.

England will "become the laughing-stock of Europe" (344), having already abandoned Corfu, and to provide loans to the landowners to accomplish these tasks (343-346).

However, despite Baker's calls for government action in the forests, he does not feel that what they have done so far has been fully the correct move. "One of the first acts of the British administration was a stringent prohibition against the felling of any trees throughout Cyprus, or the cutting of any wood for the burning of charcoal. This law … extended to the trees upon *private property of individuals!* – thus the owner of a garden could not cut down one of his own caroub-trees if they were too thickly planted; or if he required a piece of timber for making or repairing his waterwheel" (1879: 331). He continues by making the distinction that it was highly necessary to have an act for the protection of the crown forests, but an act such as that does not do any good if no "machinery exists for enforcing them" (331). Currently, the natives can evade these stringent enactments

> like any of the Ten Commandments, because there is absolutely no staff, nor special officers for the supervision of woods and forests. This important subject requires a separate department, and nothing can be more simple if administered by persons qualified by education for the development of trees suitable to the island. The poverty of the local government, owing to the miserable conditions of our tenure, which send the cream to Turkey, and suckle the necessary staff upon the thin skimmed-milk, does not permit the real improvement of the forests. It is simply ridiculous to make laws without the active weapons to enforce authority (332).

Baker continues by noting that although the law in Cyprus currently states that you can not cut a tree,

> practically you may cut as many as you like in the mountain forests, as there is no person authorised to interfere with your acts. Some miserable offender may be pounced upon in his own garden, near one of the principal towns, where the law *should never have been enforced*, as interfering with the individual rights of private property but in the situations where the prohibition is of the first importance, there is literally not an officer or man to prevent the usual depredations. Why? … There is no money, and we cannot afford an independent department of 'Woods and Forests'. If the country is to continue in this slipshod form it is a disgrace to England. There is time to save the forests from absolute

> destruction, and in my own opinion, before anything is done beyond the necessary roads and irrigation loans, every possible attention should be concentrated upon the protection and development of forest-trees (1879: 332-333).

It is unknown what effect Baker's advice would have had were it to have been put into action, as the Government did not put forests above all else, and the funding for forests started to dry up in 1882.

VII.m. Scott-Stevenson, Esmé. Lived in Cyprus with her husband (the Commissioner of Kyrenia) during the early years of British rule and published her recollections in a book in 1880. Through Scott-Stevenson, one gets a glowing view of the island, by her own account as free of military and political issues as possible. This glowing account should be taken with a healthy dose of salt, especially when she makes statements such as the following, "[t]here are no complaints of injustice or individual hardships made by Turk, Greek, or English officials; and General Biddulph has certainly succeeded in gaining the love and esteem of all those who have come in contact with him personally, or who have had anything to do with his wise and considerate government" (Martin 1999: 213).

Scott-Stevenson notes a number of non-environmentally connected events which nonetheless help to better contextualize the situation on the ground during the first few years of British rule. She notes that her husband only hired Turkish zaptiehs (Martin 1999: 217); "[t]here is decidedly a strong feeling in favour of the Turks among the English officials in the island; though, of course, justice is dealt impartially to Christian and Osmanli alike" (233), and that the government did not pay the zaptiehs enough to support a family, especially as the price of rent and food trebled with the British arrival (217, 218). Indicating a quick understanding of how to make the most from the "tourist" season, she also emphasizes that the people of Pano Platres had already started "hoarding" their belongings so that they could be sure to command their own price when the soldiers arrived at the Military Camp (229).

Her comments about the environment are usually only found in the context of some other aspect. For example, she mentions the forest laws and that her husband did enforce them in a tale told with the purpose of illustrating the submissiveness of the Cypriots, whom she described in another section as "dull and lazy" with no patriotic longings (Martin 1999: 234).

> I have often been struck by the submission displayed by the Cypriote when told to comply with any order or command. Several times, riding about the country with my husband, he has discovered a peasant committing some unlawful act, such as burning brushwood, or cutting down a tree. On being remonstrated with, and desired to appear before the Court at a certain time, the man has just bowed his head and laid down his load, going off in the most touchingly submissive manner, and appearing before the Court at the very hour mentioned. They never resist, or become violent, like so many of the inhabitants of our other colonies (235).

Again, it is worth noting that her view of the situation is likely skewed, but the fact that she specifies cutting wood as an offence indicates how prevalent and well known the new forest regulations were.

Scott-Stevenson also touches upon the grazing patterns of the people, again while supposedly illustrating the "extreme docility" of the Cypriots. She was with her husband at Myrtou, near the Panteleimon monastery "with the belt of fir and pine-trees near it"[82] (1880: 235). A migrating herd of "forty souls, about eighty bullocks, and twenty donkeys" (235) from Famagusta had settled in the area, as they said that no food remained in Famagusta and that the British government did not distribute grain during drought seasons, as the Turks had done. The Mukhtar had complained to the Commissioner about their presence and requested that the Commissioner ask them to move. The Commissioner went to speak with the people first, and he found that the herds were existing on wild artichoke roots in the area. The people were too poor to pay a fee, and they were surviving on water, bread (long thin hard dark barks made six months in

[82] Note that Donne, the next author, describes the same area but chooses to mention stunted myrtle bushes and no pines.

advance for this purpose), and snail stew. If the Commissioner forced them to leave, they would, but they would starve. “Not a symptom of anger or resentment in the voice of the poor creature as he spoke….” (236). As “their conduct during all the time of their stay had been exemplary; not a twig had been broken off the trees, and not a single complaint by the villagers could be brought against them, except the fact of their wanting the roots” (236), Scott-Stevenson reports that the Commissioner immediately gave them permission to stay provided they remained on their best behaviour[83] (235-236).

VII.n. Donne, Lieutenant Donisthorpe. Lived on Cyprus between 1880 – 1882, employed as a policeman. This information is contained within his journal, portions of which were published in 1963 and again in 1986.

Although the emphasis of his journal is not on the environment, one can pick up some descriptions of the island in certain entries. For example, on February 19, 1881 Donne records that he had tried to ride out to Episkopi, which he, as with most other authors, described as one of the prettiest villages, surrounded by orange groves, but he was nearly washed down trying to ford the then high river and had to cross it up higher on the bridge (Martin 1999: 180). Lefka also earns a favourable description, as it is filled with large numbers of fruit trees thanks to the water it receives from the Troodos (194).

Donne notes that the journey from Kykko to Lefka is “a good eight hours’ ride … but through some of the finest and wildest scenery in Cyprus. The bridlepath is rough and

[83] As with Kitchener’s statements regarding Akamas, this account illustrates what potentially could be a large misunderstanding of the livelihoods within the area. These people, from Famagusta, are given permission to remain in what was likely viewed as part of the mera of Myrtou, because they had not damaged the trees and the only thing they wanted were the roots. My assumption would be that those roots were already claimed by the Myrtou villagers, and the English government, much like a bull in a china shop, had just completely scrambled their customary access rules. This scrambling of rights could be viewed as minor, however, as in several years time the Forest Delimitation Commission delimits this area and subsequently reserves part of it from use.

steep continually crossing and recrossing the stream…" (Martin 1999: 194). From Kykkos he tried to travel to Evrykhou over what was

> one of the most abominable tracks I know in the Island and we had to dismount and lead our ponies down most of the steep descents. It was a wild and lonely part of the Island, and the haunt of the Moufflon as some say, but I never saw any of those 'sceptre animals'. After riding down a steep and difficult gorge we reached Kalapaniotissa [Kalopanagiotis] one of the largest and certainly the most curious of Cypriot villages I had ever seen. The houses were built in tiers in the side of the hill, one above the other, and one had to ride over the flat mud roofs to reach beyond (194).

Donne's description of Kalopanagiotis as being large is noteworthy, as it further suggests a sustained population within the mountain valleys.

Donne finally makes it to Evrykhou after ten hours of travelling[84] (Martin 1999: 194). He explains that the valley is "nearly the most prolific in the Island" (195), thanks to the water supply from the Troodos, as with Lefke. However, this water supply can also be a subject of contention: "A deputation awaited me in the morning on the subject of the never-ending water disputes…"[85] (195).

Donne also mentions the nuisance of the locusts and describes the government system to control them (Martin 1999: 196). By April 21, 1882 the locusts were appearing in large quantities and increasing in size daily, so he is sent out across the Mesaoria to check on the traps the government had set up. These traps and screens stretched over an area of 140 miles, and yet he notes that they "seemed indeed utterly inadequate to entrap a hundredth part of their number" (196). During his travels that April, he also travels from near Astromeriti up to Myrtou village, which is near the Ayios Panteleimon monastery, and he describes millions of locusts, as well as the final two hours of his ride as being

[84] His descriptions of the difficulties of traveling in the Troodos (as well as the descriptions of others) emphasize the difficulties the Forest Department must have had in canvassing the area in the first several years with their small staff. It also illustrates the difficulties any mountain villager would have had in traveling to the District Court to protest any inclusion in the delimitation post 1881.

[85] Although this should not come as a surprise based upon the consistent positive descriptions of the Solea Valley, this statement further confirms that the people had some sort of basic governance of the natural resources in the area in place before the British arrived. They might have disputes over water, but disputes indicate the existence of an irrigation schedule - certainly not a wild and unmanaged area and people.

over “a rugged uncultivated succession of rocky hills and valleys zig-zagging up and down over a surface of white marl overgrown with stunted myrtle bushes” (197).

Donne leaves the island in September 1882 to head to Egypt as a soldier, but he does return in May of 1893 for a visit. This return allows him to note what changes, if any, he had noticed in his eleven year period of absence. Echoing Vizetelly’s description of the mass arrival, and then departure, of British hoping to find wealth on Cyprus, Donne notes that nothing had changed in Larnaca except that “all the English established Mercantile houses had gone. Larnaca that boasted a race-meeting and a club in 1881 had dwindled again into the insignificant seaport of Turkish times…” (Martin 1999: 203). The journey between Larnaca and Nicosia could now be made in four hours with three ponies pulling a chaise (203). Bare white chalk hills still greeted the traveller between the two cities, but as one approached Nicosia, after having gone by the Leper Farm, the work of the Forest Department was evident.

> [T]he trees and eucalypti planted 12 years before had grown up and almost hidden the old Turkish ramparts and now formed pleasant avenues of approach….Away in the distance the long low building of Government House was almost hidden amid the trees that had grown up around it – what 15 years ago when Sir Garnet Wolseley pitched his camp there was only a barren eminence (203).

Finally, Donne also comments upon some of the travellers and officials to Cyprus in the past, and he notes that Baker’s work “is a well known and standard book” (Martin 1999: 205). He also spends time musing as to why Cyprus has not developed more fully than it has, and he states that it will never completely develop as long as the emphasis remains on Egypt and the Tribute remains in force (205).

Summary of Late 19th Century Accounts

Based upon these descriptions, one could create an argument that the environment of Cyprus was is in a degraded state at the time of British arrival. However, the amount of inconsistency between specific versus general descriptions (also a concern with the mid

19th century accounts), combined with concern that the travelers' views are being negatively influenced by the underlying assumption of most of these authors that the Mesaoria should naturally be tree-covered, creates a strong reason to more closely investigate these claims. Since, apart from the subjective eyewitness accounts of the landscape, biophysical data are largely lacking, it would seem that something apart from environmental issues is influencing the degree of positivity or negativity expressed in the accounts above. Two main issues can be identified.

First, the intended audience of the account strongly alters how the island is described. Baker and Kitchener provide excellent examples of this. Both of these individuals travelled over large parts of the island and presumably were describing things they themselves had seen, as opposed to some of the earlier travellers who inserted descriptions of places which they had not visited.

Baker included in his travel book many calls to action for Britain to overthrow the damage caused by the Ottomans, such as "we, the English, have the power to make [the Cypriots] rich" (Turkish rule made them poor) and "England has acquired the reputation of the civiliser of the world". Within this context, he describes desolation within the Troodos range - "There was a terrible picture of destruction throughout the forests of Troodos". However, it must also be noted that he utilizes Löher's words for the more dramatic parts of this description.

Kitchener, on the other hand, was writing a piece for a popular magazine (Blackwood's Magazine) with the intention of painting a rosy picture of the empire's latest acquisition to the average Brit. He comes across a more supportive and optimistic of Britain's decision to take Cyprus than Baker, and his environmental descriptions follow a similar tone. For Kitchener, the Troodos Range was a picture of prosperity - "The hills around are full of mineral wealth and clothed with mighty pines…." "To the

west the mountains get wilder, and the pine-forests grow larger and more dense." "…Kiku, which can also be seen in the pine-covered hills".

In other words, Baker, who was trying to emphasize the amount of work ahead and justify the presence of the British on the island, states that the island's environment is degraded and that it needs to be fixed (and that the British have the capability to fix it). Kitchener, who was essentially trying to encourage "warm fuzzy feelings" for the island, describes the forests as beautiful and lush. Which description is the correct one? Likely neither, as the truth can probably be found somewhere in the middle.

On a more general level, three main styles or objectives can be ascertained in these accounts: a) A desire to make the Turks look bad in order to make the British look good by comparison, b) An over-riding concern to illustrate, even if subtly, how good rule (i.e. British) could make the island bloom again, and c) A more general desire to make Cyprus look better than perhaps it is as the British are stuck with it now, and they should make the best of the situation.

Second, several of the sources are simply lifting passages out of the accounts already published. For example, Baker appears to borrow from Löher (who appears to have borrowed from Unger and Kotschy), Savile liberally borrows from everyone before him (although, to be fair, his work is intended to be a compilation of the sources on the island), and as we will see in the final section below, many of the following authors borrow from Baker, including Madon. In this context, it is difficult to ascertain what actually is happening. If the original source of the descriptions of degradation are accurate, then the following histories are likely fairly truthful as well. However, if the original source is not accurate, or, as discussed above, was written by someone with a preconceived notion of how a "good forest" should appear, even if that notion is not applicable in a Mediterranean climate such as on Cyprus, then these descriptions and the ones following would be fundamentally flawed.

VIII. THE FOREST REPORTS OF WILD AND MADON

Wild and Madon were both trained as foresters and hired to serve in Cyprus by the British, so they do not necessarily fit in with many of the general travellers and government representatives above. However, despite these obvious differences, their reports can be situated into the overall theme of early attempts at describing the new acquisition. Further, the lines between forester and non-forester are not as sharply delineated as they become in the future, as both Wild and Madon borrow from some of the earlier traveler accounts in creating their reports. Therefore, I have included their forest descriptions within this appendix.

VIII.a. Wild, A.E. Visited for three months in the winter of 1878-79. Indian forest officer, brought to Cyprus to advise on forestry management. As with Madon's later works, he carefully details what should be done about forest management, replanting, staff, etc. For the purposes of space and consistency, I focus below only his descriptions of the state of the environment. Wild states that he included a map with his report (which was submitted to the Houses of Parliament in 1879), but it unfortunately has been lost over the years (see Gole 1996:19).

General history of the forest. Wild begins his report by stating that earlier works and Eratosthenes said that the island was densely wooded. The version of this history that he follows states that it was not until the Lusignans, during the first centuries of their dynasty, that these forests began to be impoverished through their use in "shipbuilding, &c." (1879:1). The next ruling power, the Venetians, also used the forests for similar purposes, but they did so in a wise enough manner that the forests were not damaged. The ruling power which damaged them the most were the Ottomans; "Some 300 years ago the

Turks succeeded to the island, and it is to their total neglect of the forests that we must attribute their present poor condition and decreased area" (1).[86] The forests in 1878 were greatly irregular, and had been reduced to just the southern and Northern Ranges, with dense growth only present in inaccessible areas. "Around villages, and in suitable localities for transport, the forest is already so thinned as now to be unworthy the name" (1). Because of the inaccuracy on the map he was provided, he states that he cannot exactly estimate the area of remaining forests or their value, although he will try to describe their extent and quality (1).

General Description of the forest. Wild points to several reasons behind the current reduced extent of the forest. The extension of vineyards and cultivation is responsible for some of the reduction in forests. Cultivated plots can even be seen now at a distance of 4 miles from a village[87]. Second, the forests have not been properly controlled or supervised. Too great of indiscriminate fellings have taken place "perhaps … for the gain of revenue" besides for cultivation. Now, the once fairly-covered, closed, and regular forest has become an open, scattered one, which has caused "not only a diminution and deterioration of the area of the forests of the growth of the trees themselves, but also a deterioration of the soil through exposure to heat and atmospheric influences" (1879: 9). Third, the numerous fires caused by careless shepherds and people expanding cultivation have "…greatly tended to reduce fine growing forests of all ages to a bare and barren spot, destitute of all tree vegetation …." (9). Fourth, the wasteful method of extracting resin, "and the great extension of this operation among the older class of trees throughout

[86] As with previous descriptions, one can see how blame for "destroying" the forests always rests most heavily on the Ottomans, although more flexibility is allowed in assigning blame to the rulers prior to the Ottomans.

[87] This is certainly a curious statement, as all of the previous authors have bemoaned the LACK of cultivation on account of the excessive taxation and depopulation of the island. Some of the authors who are less sympathetic to the Cypriots also add into this history a questionable description of them as lazy and indolent, and this description as well does not mesh with the idea of them actually extending cultivation, especially at a distance of 4 miles from the village.

the whole extent of forest, and especially among the P. laricio forests, has permanently crippled them in their growth…" (9). Finally, the "establishment placed in charge of the forests is utterly inadequate, even if it had been their duty, to protect the forests efficiently" as it consists only of one guard at Kilani, one guard at Makonda [Magounda] (who was appointed by a commissioner on Oct 4, 1878), and one guard at Levka (who was appointed in 1873 or 1874)[88] (9).

Wild states that to his knowledge "…formerly no restriction was placed on clearing forest ground for cultivation, and that clearances have been made when and as the people liked"[89] (1879:10). Further, the felling that has taken place, for cultivation or other reasons, has been incredibly wasteful, "almost beyond belief. If a native cuts a tree down and it does not suit him he at once fells another, and leaves the former to rot on the ground. It is incredible, but yet a fact, I believe, that to obtain the branches of trees (which they can more easily do when lying on the ground than when standing, and which entails less trouble than cutting up the tree) the inhabitants will fell fine trees and leave the trunk to rot on the ground" (10). "Dead and dry logs and trunks are visible in all parts, and present clear evidence of the wanton waste which has taken place"[90] (11). All hope is not lost, however, as he did not see a large amount of recent felling, and he states the recent order prohibiting tree cutting should do much to prevent the former abuse (11).

Specific Description of the Forests. Turning more specifically to the forest trees and extend of forests, Wild describes the countryside as he travels through it. Bare hills, fallow land, and cultivation are encountered when one journeys between Larnaca and Stavrovouni. Stavrovouni itself is covered with a low growth of myrtle, dwarf oak

[88] Madon also cites many of these factors. Just on the basis of the previous travelers' accounts one could question the intensity of some of them – for example, if the forests are as inaccessible, with no roads and steep slopes, as other travelers record, it is unlikely that they all could be overworked. As for pitch collection, Montrichard in the early 1870s had suggested that it would be profitable for the government to try to extend its collection, so there may indeed have been an increased number of scarred trees.

[89] As shown in the main text, this assumption is inaccurate.

[90] One may note that this description sounds quite similar to that offered by Löher and Baker.

(*Quercus alnifolia*), thorny and aromatic plants, and a few scattered *P. maritima* (1879: 2). There are barren hills between Stavrovouni and Korno, while between Dalijibo and Lithrodonda, there are eight to sixteen year old *P. maritima* as well as small scrub along the road[91]. Wild counted 76 pines along this stretch which he stated had been cut while young and taken away (2); presumably he estimated age from the size of the remaining trunk.

There is a "somewhat older but still young growth of *P. maritima* intermixed with dwarf oak" (Wild 1879: 2) between Lithrodonda and Machaeras Monastery. Also, whole pines and oaks can be seen felled along the road, some felled as high as 5 feet from the ground[92]. There is then a taller and older growth of *P. Maritima* of between 20 to 80 years old, although it is still very scattered. It is mixed in some cases with dwarf oak, and seems to continue this irregular pattern of "a greater or larger quantity of old or young growth predominating; now a young plot of small area, again a large blank, a larger admixture of oak, and so on till we reach the heights of Adelphi and Troodos" (2).

In general, the lower region of the "Olympian range" has irregular *P. maritima* "of all ages mixed together, in parts middle aged, in others again young and old predominating, with little or no undergrowth, of more or less pure coppice woods of dwarf oak and arbutus, and again with a slight admixture of *P. maritima*". Above 4000 feet in the Troodos, there is just a "thin poor forest of *P. laricio*, mostly of 80 to 200 or more years of age, averaging 3 ft. 6 in. to 6 feet in girth and 50 feet high, with here and there on the deeper soil and more open spots a group of younger trees" (1).

[91] Wild does not comment upon why there are young trees in this area, whether as a result of purposeful planting or natural regeneration.

[92] I am unsure what he means by this statement. Later officials complain at length about the wasteful felling practices of the Cypriots, including the fact that they do not cut the tree as low to the ground as they could. However, five feet about the ground seems quite high for the average Cypriot. If they were felled at five feet, perhaps this represents that the trees were on steep slopes?

More specifically, near Platres, as well as “Lahudara, Asine, Ispilia, and Karuna”, Wild notes that the forests become denser. He sees a thin forest of P. maritima on the spur between to the west and north of Phini while traveling from Phini around the western slope toward Trooditissa Monastery. The Kurvalli Valley has a thin pine forest of 20 to 40 years on its southeast by east slope as well as rocky and loose stones. The northwest slope has young *P. maritima*, and more may be grown there. Around this same area (“[a]round here”) there are hundreds of trees lying on the ground, including pines and, in valleys, planes. Sometimes there are vineyards at the top of the slopes, and sometimes the vineyards are in the middle, in which case there is a thin forest above and below. The extension of cultivation is to blame for the clearing of the Ambelaki Valley (which runs east to west), and Wild reports that in these valleys there are trees that have been felled at 20 feet above the ground[93]. However, there still are a few acres of good young *P. maritima* intermixed with dwarf oak on the south slope of this valley, although the forests are not continuous in this area; rather, one sees a “plot of new growth, then one of old, then a vineyard, and so on” (Wild 1879: 2).

Crossing into the Karpuali valley, which runs northeast by southwest and separates the Nicosia and Limassol districts, Wild notes that the extension of cultivation has destroyed the forest on its east slope, while on the west slope there are trees from 2 to 40 years old, intermixed with *Arbutus andrachne* and dwarf oak. A small spur with a thin covering of pines can be seen at the top of the valley. Vineyard covered hills, with occasionally bushes or waste land, are met with to the north. In this area he also saw ten felled pines (4 ¾ ft in girth at 4 ft) lying on the ground, and a fire burning close by. He notes that a man ran off from this area before he could catch him, and that most of these trees had previously had resin extracted (Wild 1879: 2).

[93] Again, I do not understand this statement.

Continuing up the valley to the north, one goes through Ayia Dimitri ("a small village") and then reaches the village of Tris Elias. This valley has a young forest on its north aspect in which a few old trees, dwarf oak and arbutus are intermixed. The older trees could likely be felled for resin. The south aspect of this valley is not as well wooded, but on a northwest slope "some distance above the village [of Tris Elias]" (Wild 1879: 3) there is a mature pine forest.

Wild notes that there are a few old *P. laricio* with ten to twenty year old *P. maritima* on the saddle crossing into Phini and Trooditissa valley. The forest changes continuously within the valley itself. On the east and southeast aspects and along the crest of the watershed, Wild states that there are old trees of laricio, widely spaced apart, with a "sprinkling of maritima". At top of the west and southwest slopes there is a patch of old trees, then a five acre plot of young trees, "and so on". Lower parts of the slope have no pine, but only dwarf oak and arbutus (Wild 1879: 3). Wild sampled several 100 to 130 year old *P. maritima* trees at the Trooditissa monastery itself. They were located on a gentle southwest slope in an open and badly grown forest (approximately 23 trees per acre by his calculations) (3).

Continuing on to the summit, Wild notes that it is quite bare, and the slope just below it has a scanty covering of "a more or less mature and retrogressive forest of P. laricio, extending, on the N.W., to the village of Prodromo, on the N. skirting the villages of Medula and Pedula, almost to the watershed of the Solia (Xeropotamos)" (1879: 3). There are also a few stunted juniper above the P. laricio on this slope, and the forest does not appear to extend to the south. At the head of Phini valley, the forest is very thin and sometimes nonexistent (3).

Wild describes the scene leading up to the summit as "[t]ruly depressing" and notes that "decayed, decaying, and half-burnt logs literally strew the ground among standing dead, dying and dilapidated trees, with dry stretching branches" (1879: 4). The trees that

do exist are short; the few he measured were 36, 45, 60, and 57 feet. While there, he measured one recently felled tree and found it to 155 yrs old. To the south, also not far from the top of Mt. Olympus, "there is an extensive plot with a north aspect, where the forest is likewise in an extremely bad and dilapidated condition. The trees are far apart and present a very forlorn appearance. They are some 150 to 300 years old, small in height and the tops more or less tabulated" (4). The slope is gentle here but there is no soil depth and much is just bare rock. In general, Wild describes "wanton and unwarrantable destruction" noting that not only have severe fellings taken place in former times, but they are now taking place as well on the basis of the 12 cut trees he saw was leaving this area and heading toward Prodromo (the age of one was 223, the other 270) (4).

"On a spur running west from Troodos behind the village of Prodromo to that of Limihu, the half of the forest of pure old laricio, with north aspect, was felled many years ago, and the logs are still lying near the stumps unused. It is difficult to imagine why the felling ever took place, but perhaps the villagers had an idea to extend cultivation" (Wild 1879: 4). While traveling north from Prodromos towards the Solea valley, Wild notes that there are a group of trees between 100 and 200 years of age, "mostly all severely cut and burnt for the manufacture of pitch, among which, even lately, some of the better, larger, and untapped trees have been felled to procure troughs for kneading bread, squares &c….One cannot imagine a more wasteful use of timber than this…." (5).

In general, the forest in this area is exceedingly thin and the trees are of bad growth and tabulated, they show cuts and firing for pitch, and there is little undergrowth. One sometimes comes across a young crop of laricio, but usually it is unhealthy. There is evidence of fires of varying extent which sometimes would burn just one tree and other times would burn an entire plot of young trees. Most of those trees that were burnt had been felled and carried away, and Wild suggests that the inhabitants may have started the

fire to get the tree. This type of forest extends down the spur toward Medula and Pedula, and then to the east. On the eastern slope, which has a gentler incline, there are a number of felled trees being readied for transport. The soil is sometimes rocky and stony, but other times it is deeper (Wild 1879: 5). In this area, Wild records the story that three years previous to his visit some 20,000 trees had been marked for sale with the purpose of the extension of resin in the forest, but no purchasers could be found[94].

Wild continues to travel in an east/northeast direction along the northern spurs of the Troodos, and notes that he travels out of the pure laricio forest and comes into sight of Solea Valley and Adelphi hill, which has a forest of *P. laricio* and *maritima*. He observes a quantity of young *P. laricio*, with a few middle aged and older trees mixed in as he travels down into Solea valley. "This is a quite natural regeneration, and might be completed by planting up with larch, and the older trees taken out" (Wild 1879: 5). There is a mixture of dwarf oak and arbutus there too. "The slope of this valley is wooded in a more or less degree almost all the way till we near the village of Galata"[95] (5).

Switching to the districts of Baffo [Paphos] and Levka [Lefka][96], Wild notes that these areas contain the most extensive and best preserved parts of the forest. The hills go off in a northwest direction, and Wild states that a good idea of their composition can be obtained by looking at the forests from the village of Panayia, or from the crest above Tsakistra on the road to Kykko. It is entirely *P. maritima*, with an even, rather open and middle-aged growth (1879: 5). Near villages and on the lower outside hills one also may see a small sprinkling of young and middle aged pine, which gradually becomes thicker

[94] It would seem as though this statement would weaken his argument, rather than strengthen it. While it does suggest that the previous management was poor, it also suggests that there were 20,000 trees which could be marked for sale (no word as to by whom) and further that none of these wasteful and reckless inhabitants were interested in working them (although they are presented as destroyed everything else).
[95] Again, as the Solea Valley has been described as being inhabited for centuries, his description of this heavily inhabited valley as being well wooded does not mesh well with his general statements that the Cypriots are poor managers of their forests.
[96] Lefka was never a district under the British, but rather a nahieh in the Nicosia district.

and darker as go up. They look even from afar, but at a close distance, one does find that there is “a great diversity, a mixture of age classes, here young, there old, and again medium predominating; here fairly close, there open, with ever and anon a blank of more or less extent caused by fire and felling, with small shrubs, sometimes oak and arbutus, sometimes only cistus and small plants” (6). The only constant is that *P. maritima* is present.

Wild further notes that he did from time to time come across old trees, which could be felled, and in some of the plots where middle-aged trees predominate they could be used for the extraction of resin, provided that they had “rest and immunity against the ravages of fire” (1879: 6). He states that some of the areas with young growth will require thinning, while other areas of young growth require filling up. “It is in this tract where most of the timber operations have been carried on” (6).

According to Wild, “In the immediate vicinity of Kikku to the east there is little or no pine forest of any pretensions, mere scrub of oak and arbutus. Close to the monastery of Kikku there is a small fine forest of *P. maritima*, which has been preserved by the monks” (1879: 8). On the road leading from Tsakistra to Kikku, Wild comes across a “pure low forest of dwarf oak (*Quercus alnifolia*), *Arbutus andrachne*, and *Acer* (Maple)” on a steep slope of loose stones with a northeast aspect (8). Within the streams of the Paphos Forest, Wild finds platanes (*Platanus orientalis*), alders (*Alnus orientalis*) and also small plants of *Nirium olianda tamarix* (8).

Wild also describes the outlying (minor or scrub) forests. He notes that Loph forest (which he states is located between the streams of Loph [Lophos] and Kilani nine miles from Limassol on a surface of limestone and marl) has an extremely open *P. maritima* forest of 30 to 60 years in age. Many of these trees have been damaged by fire and resin collection, and many have also been cleared for the extension of vineyards (1879: 9).

The Monagri Valley runs parallel to Loph, but it is less wooded, except on the head of the east slope, where there is a thicker growth of various aged pines up to 70 years old. Many of these trees also show signs of being worked for resin. Wild notes that continuing on toward Loph he sees many young burnt pines, maybe for cultivation extension. On the whole, this forest in its current state is not worth much and it would need to be regenerated (1879: 9).

At Kilani, Wild states that the villagers told him that there had been many more trees than now. “[T]he forest land between Loph and Kilani had been converted into vineyards, which gave more revenue” (1879: 9). At Orides [Orites], Wild found a low forest seven miles from Baffo [Paphos], which extended from Mamonia almost to Kuklia on the left of the Jarisu River (9) “possibly of dwarf oak, wild carob, and olives &c.” (9-10). He did not visit this forest himself, but he observed it from a distance and the natives told him that there were pines on the other side of the slope in an area in which a plantation could possible be formed (9-10). Wild also notes that there is a small forest at Akamas of stunted pine which has been claimed by the Sultan, although Wild himself did not visit it (10).

VIII.b. Madon, Paul. 1880-1882. Madon was a French forester hired as the island’s first Principal Forest Officer, following difficulties obtaining a British forester from India. He had experience in Algeria, as well as the Region du Feu in France. He writes his reports and correspondences in French, which are then translated into English with varying success for the government officials. He left Cyprus in 1882, when he stated that the work that he had the funds to complete was finished, but strongly emphasized that more work was necessary if the funds were to become available. Besides numerous minute paper correspondences, he also wrote two lengthy reports on the state of the forest and his suggestions for them, a general one just on the Southern Range which he wrote in 1880

soon after arriving on the island, and a more detailed one covering the whole island which he completed in 1881 before departing. Both of these reports were published together in 1930, but I have maintained the original year in which they were written in the references below in order to help distinguish between them.

Madon's First Report: *The Replanting of the Island of Cyprus,* August 15, 1880. This report described only the forests of the Southern Range.

As with the majority of earlier accounts, Madon begins by noting the Classical tradition[97], emphasizing it in his first several pages as strong justification for the need (and the chance of success) of reforesting Cyprus. He also mentions the various cycles of deforestation – cutting down thick growth to obtain ownernship (Eratosthenes), supplying wood for Alexander's fleets, building construction for Lusignan, and commerce and ship-building for Venetians. Differing from Wild, who blamed the Lusignans for damaging the forest, and not the Venetians, he states that the Venetians may have carried away more wood "perhaps than any other possessor of the island" (1880:2). He also emphasizes that he has thought of another source of the forest's destruction, one that has not been mentioned by the earlier authors, and that is to supply fuel for mining. In fact, mining may have been more destructive than all of the other causes.

However, while Madon notes that all of the above mentioned things may have ruined the forests for years to come, he argues that they did not destroy them. This is because these fellings were almost sustainable. Only fully mature trees would be wanted for the things above so the younger trees would necessarily have been spared, meaning that the forests would be ruined, but not completely destroyed. In other words, the ruin of the forests today cannot be blamed on the far past – they must be blamed on a more recent

[97] Building upon the classical sources, Madon suggests that the Mesaoria was cleared in a very remote period and that proof can be seen in what he suggests are ancient deposits of torrents on the plain. He also suggests that forests on the Northern chain were likely ruined centuries ago as well (27).

past, and Madon singles out three specific activities within this past, namely "fitful cultivation, fire, and the grazing of goats"[98] (1880: 2). He recognizes that these things may not appear as obviously to be destroying the forest, but they are bit by bit doing so over time, and this is something all countries, "despite the efforts of foresters" (3), have to face, although this can be halted at a lower expense than would be needed to replant the forests after they were totally destroyed[99].

Madon defines "fitful cultivation" as burning down a forest tract in order to get two or three years of cultivation, and he states that the process of doing so leaves the soil so sterile that nothing will grow except thin pasturage for goats. It is this activity to which he attributes the appearance of much of the island, especially the Limassol District, Mesaoria plateaus, and the lower slopes of the Kyrenian Range. This condition not only indicates revenue lost for the government, because of what Madon argues are the selfish actions of a few who are not considering the greater good, but it also is a concern for the rest of the revenue-producing areas "owing to the influence which clearings exercise on the climate and on the rainfall and water supply" (1880: 3).

Madon notes that this destruction is still proceeding by taking piece after piece of land.

> They continue their work still at the present day, though slowly; not openly as before, but by robbing here and there a verge on the border of existing cultivations, or by reclaiming ancient usurpations, too often under protection of the law, or by right of title of which the forest was recovering possession. This is the enemy that we have to watch assiduously and that we can now combat, first of all by preventing any fresh encroachment and carefully looking into titles, and, later on, by repurchasing these lands doomed to sterility, or by having recourse to expropriation, either definitive or temporary (1880: 3).

[98] Thus, Madon still blames the Ottoman Period, but he specifically focuses on the goats within that period.
[99] Madon states that he has observed a ratio of 72 felled to 100 standing trees in the "best preserved parts" of the southern chain, and those felled trees, if not worked within the next fifteen or twenty years will rot. As for seedlings, he describes a ration of 25 seedlings to every 100 standing trees (27).

If this were not being done, if the areas meant only for soil were left as forest[100], the wood industry would be worth over £4,200,000, which would be enough to feed 400,000 inhabitants with an annual income of family of four being £56, which is higher than what it actually is (1880: 4)[101].

Madon notes that the second activity which he highlights, fire, is partially linked with fitful cultivation, either to open the way for cultivations or simply to reclaim abandoned land which had reforested itself with *P. maritima*. This is the case at "Rakopetra[102], near Platres, at Stavro, and at Machaera" where *P. maritima* seedlings "have taken possession of entire slopes, where old walls testify to former cultivation" (1880: 4).

However, according to Madon, fire is also linked with the shepherds who light them in the summer to ensure that they will have a supply of dry wood fuel in the fall, as well as better foliage the next spring for their flocks. Although constant monitoring of the forests can help reduce this activity, it needs to be combined with prohibition of pasturage in the great forests, including, if necessary, prohibition of pasturage in any burnt forest, and collective responsibility in the case of fires (1880: 4).

Madon states the following about the third activity, the grazing of goats[103]. "The island possesses 250,000 goats, those ruinous animals that make us pay so dear for their milk and other things they produce, that have stripped of all verdure Spain and Greece, that

[100] Madon defines areas which were meant for forests as those regions in which trees could grow, excluding areas where "productive cultivation" has replaced the ancient forest on the plains, or successful vineyards have replaced it on slopes.

[101] Madon and the later foresters, some more so than others, all utilize statistics to create some figure of the forests' monetary worth in order to argue their points and attract government attention. Unwin was notoriously bad about presenting unproven figures. More generally, the problem with many of these figures was that they never played out in reality.

[102] Presumably Kakopetria

[103] Previous travelers' accounts provide evidence that goats were grazing in the forests for centuries, yet Madon sees their damage as only happening during the latter part of Turkish rule. One can only assume that either he did not think they were grazed in the forests in earlier centuries, or that he thinks that their numbers dramatically increased in the current century. This argument is made by Warren in a minute paper on the topic of forest conservation in the 1880s, while Unwin in 1928 argues a different position by stating that the number of goats actually increased following the British occupation. It quickly becomes evident that no clear data are available on the topic of the goat population leading up to the time of occupation.

have reduced the forests of Provence, Corsica, and Algeria to mere thickets, owing to their depredations" (1880: 4). Quoting Baker, he dramatically notes that,

> We shall soon find the bare rock … where now the thicket stands, which the untiring and voracious teeth of the goats are ever baring – those insatiable rodents perched up amongst the busthed in order to reach the bighest branches – what appetites they have, these eternal starvelings! … What ravages do they not commit in our forest of the porphyric range, where, during nine months of the year, the soil on which the forest stands and which can alone nourish them is absolutely bare. The goat watches for the opening bud, for the shoot that with difficulty pierces the bark, for the young seedling that emerges from the soil, and every burst of vegetation is arrested under the unceasing action of its cruel teeth, of its poisonous saliva! (1880: 4).

Madon recognizes that the goats cannot be completely removed, because of their importance to the Cypriot peasant, but their number can be reduced, by keeping them out of the forest and by taxing them more while lowering the tax on sheep and oxen (4). Although he does not appear to have much data for Cyprus, Madon suggests that the majority of shepherds are landless, as that it is how the situation was in Algiers (24).

Madon re-emphasizes at the end of this section the importance of these issues, noting again that they are even more dangerous than previous ruination, because they attack the young seedlings – thus they can lead to destruction, not just (temporary) ruination (1880: 4). The forest trees will soon die out and leave only shrubs, "without development and without utility" (4). Further, he notes that "It will be a difficult thing to induce the inhabitants to give up the ways to which they have been accustomed for centuries, to make them understand the measures that are necessitated by the general interest, by foresight, by responsibility, all of which are matters quite beyond them. They will, therefore, resist every attempt at amelioration, and often one will have to turn a deaf ear to their complaints"[104] (5). To drive his point home, he includes the often quoted statement by Baker that "the Cypriot is convinced that wood, like air and water, has no

[104] Madon is obviously less optimistic than Wild on this point.

other master than the God who made it…Yet if he would be content with taking only what he really needs!" (5).

Madon estimates that only about one-tenth of the island is forested[105] (1880: 11) and he strongly suggests that more of the island should be replanted. By using international examples, he argues that there are five principal aims of replanting. These include

1. Climate (i.e., the action forests have on temperature and rainfall)
2. Springs (i.e., forests can produce them or at least regulate those already existing)
3. Ability of forests to prevent inundations or encroachment of sand dunes
4. Ability of forests to sanitize malarious districts.
5. Ability to be a commercial enterprise, to make value out of the waste lands (5).

Madon also provides detailed financial figures of the costs and revenues as well as instructions as to which trees should and should not be utilized in replanting. It is notable that he does not recommend eucalyptus (11-23).

Madon further estimates that only one tenth of the island is cultivated[106], and he suggests that obtaining land for replanting should not be difficult. "For if one considers … the Ottoman law, it appears impossible that the greater part of the uncultivated lands do not belong to the Government, which can reclaim them by examining carefully the evidence of witnesses and false title-deeds, two thing which are very common in the markets of the majority of the Turkish states" (1880: 23).

Madon also discusses the issues of replanting private holdings in this report. The current situation is not positive, so much so that Madon states that "[t]he instinctive hatred of forests is, perhaps, the only point of affinity between Greeks and Turks" and it

[105] Recall de Montrichard's (1874) comments that wooded terrain could be found on approximately one fifth of the island.

[106] For comparison, de Montrichard (1874) suggested that one fifth was used for cultivation, with rotating fallow lands accounting for two thirds of that. Lang (1878), who had served as the manager of the Imperial Ottoman Bank on Cyprus prior to the British occupation and owned a farm on the island, suggests that only 1/20th of the island is cultivated.

seems to extend "to all trees when such a desolate and calcined plain as that of Cyprus is seen, and the still sadder sight of most of the villages, which do not offer to the fatigued eye one particle of verdure[107]" (1880: 23). The lack of trees on the plains and in the villages has usually been described as a result of the heavy tax on fruit trees, but this tax has now been lifted, and results should start to be seen, albeit slowly "on account of the intellectual inertia of the natives" (23). Madon argues that the extension of the culture of carob, olive, mulberry, and pomegranate tree would be very advantageous, and he points out the benefits of charging a tithe, rather than a settled tax, which had to be paid a fixed period[108] (23).

However, lifting the tax is only one part of the problem. Madon turns his eyes once more to the goat, re-emphasizing points he made while discussing public lands. "The chief cause of the want of trees is the unlicensed liberty of pasturage everywhere. I do not doubt this, my opinion having been confirmed by many statements of owners. One can neither plant, nor graft, because the goats destroy all, and the law does not give to the owner any practical power to protect himself. The reduction of the excessive number of goats by an increase of taxes and an appointment of guards seems to me the most practical measure"[109] (23).

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[107] As noted previously, although the vegetation around villages is often said to be missing when describing the situation generally, when specific villages are discussed the villages often have vegetation. It is likely that some villages had vegetation and some did not, and that any generalized statement about the situation is false. More generally, it should be emphasized that Madon was writing this report in August following his initial tour of the forests, and as the previous accounts verify, the island does look much different in the summer than in the winter.

[108] Whether tithes should be paid in kind or paid in money is something the colonial sources grapple with, and they eventually shift to tithes paid in kind at the insistence of petitioners and the Legislative Council. The tax on fruit trees is lifted in 1897.

[109] The Goats Law of 1888 forbid the importation of goats without special permission and provided for the High Commissioner to increase the tax on goats and reduce the tax on sheep when he saw fit, provided that the annual revenue from the animal tax remained the same. The fact that it took until 1888 to pass a law following up on Madon's suggestions is an indication of the different concerns of the government departments – the Revenue Department, as well as other officials, repeatedly stalled this request out of concerns of the effect it would have on revenue. As for Madon's suggestions that the staff needed to be increased, this was an uphill battle throughout the entire British period. (Bulwer did manage to increase the number somewhat in 1887.)

Madon also notes the presence of a large number of wild olive and carob trees on the bare lands which were covered with brushwood. “They are found, for instance, on the long reaches between Kyrenia and Akanthou, between Yialousa and Rhizokarpass, and above all between Kouchia and Limassol” (1880: 23). Madon further argues that since, in his mind, “the Government cannot utilise them”, that the government could consider giving up ownership of the trees on the stipulation that they be grafted, and the tithe could even be lifted from them for a number of years to encourage this behavior (23). The department would need to follow a few rules, such as that large areas are not relinquished for the grafting of just a few trees, but by following the general plan, the government could get important revenue through the tax on land which otherwise is useless[110] (23).

Madon’s Second Report: *The Forests of the Island of Cyprus. A Summary of their Situation, Composition, Present Condition, Future: The Measures to be Taken to Assure their Preservation.* May 15, 1881.

This report, written after Madon had been on the island for approximately a year, begins much the same as the previous one, with the exception that the order of the causes of deforestation has been partially amended. They are now: the excessive number of goats, fitful cultivation, fires, and the uncontrolled feelings of a population which in these matters push indifference and carelessness to their last limits” (1881: 31). The remainder of the report contains a general picture of the forests as well as a more detailed description of tree species and locations than provided in the 1880 report.

[110] Madon’s view of what is, and is not, beneficial in a forester’s view is clear in this section. Olive and carob trees, as they are not timber trees, are not of interest to him as a forester. In fact, he is willing to allow the government to give away the trees on these lands for free. The topic of what should be done with these wild olive and carob trees occupies many minute papers, as well as the question of what types of trees are important to the government, and this definition seems to waver between employees.

Madon lists the forest species by order of importance, and then provides a more detailed description of each species. Thus, for Madon the most important forest species are the *Pinus Maritima*, *Pinus laricio*, cypress, cedar, carob, and *Quercus alnifolia*. The species will be further discussed below, but Madon sees the pines as being important for plantations and timber production, the cypress being important because interest everywhere is allotted to it, the carob having importance for its special utility, and the oak being important for its abundance (1881: 31).

Turning first to Madon's description of the most important forest species, the Aleppo pine (*Pinus Maritima Lamb, Pinus Halepensis*) forms nine tenth of the island's forests. Wood is medium quality, bark rich in tannin, "It yields resin, but cannot furnish in this respect remunerative products, except under special conditions, which it would be difficult to find in the island"[111] (1882: 31). The Aleppo pine attains rich dimensions on Cyprus and can grow on all sorts of mineral soils up to 4500 to 5200 feet. The natives use it for almost all the heavy wood for houses, furniture, wood-work, and house utensils. Madon notes that it is common to see trees of 10 feet in circumference, but they are short and knotted, "owing to their isolation, and are too often injured by the clumsy methods of procuring resin to which they are subjected" (32)

Pinus laricio can only be found on the summit of Troodos and some crests to the west, at 4500 to 5000 feet. The perfect wood is excellent, but the superficial wood is of no value, and superficial wood predominates to a very advanced age, so that it cannot be advantageously felled until it is 6 feet in circumference, which corresponds to its 250th year. It grows very slowly, but can arrest the clouds on the summits and hold the snow and bind the soil. It excels in building and working applications; Madon states that "the Italian navy employ it for masts in spite of its being brittle, and it yields excellent

[111] Madon is one of the few early authors to note that resin extraction is not profitable; many other sources complain about the damage it causes, but suggest that if carried out properly, it could be an economically beneficial activity. Experiments undertaken about six decades after Madon's departure support his claim.

planking" (1882: 32). On Cyprus it is used as Aleppo pine is used, and it is preferred over Aleppo. "The climate of the summit on which it grows tends to render it knotty, and this defect is exaggerated owing to the clearings in these ranges" (32). Resin tapping is detrimental to it.

Turning to cypress, Madon suggests that in the past pyramidal cypress (*Cupressus Fastigiata DC*) would have clothed all of the Northern Range with dense forests, as well as a part of the Mesaoria plain, and the limestone spurs of the south. It does poorly on plutonic soil, so it would not have been dense in the Troodos. Now, however, it is only represented by a few young trees. "It is evidently the wood of Chittim of Scripture, for it was the wood that gave the island its former repute, and if it is no longer renowned in the present day, it is because of its rarity" (1881: 32). Natives highly esteem it, but they do not use it wisely. For example, Madon is not fond of the native style of architecture because they make poles from its young trees to use instead of mats or reeds for their mud roofs. He argues that the current number of Cypress "gives an idea of the state of the forests, and of the ignorant and culpable want of foresight of the population" (32).

Madon argues that cedar must have covered all the heights of the mountains from "Machaera to Livrami" in the past, although he does not provide a reason for this statement. Cedar can still be found in the higher parts of the forest of Mavrosykes, where there are some thousands of trees around 4500 feet in altitude which are not older than 80 years. Madon is quick to note that this is a very insignificant age, as cedar can reach 2000 years in age. A clump of cedar can also be found on the other side of Ogostina valley, and another 44 very young trees can be seen close to Kykko Monastery, with a third group much lower down, where now a zone of olive marks the cedars' former extent. Some houses in Kambos were made with cedar, "and in the carvings of the Kykko Monastery,

which has had a great deal to do with its destruction"[112] (1881: 32). If the trees could be guarded from the inhabitants and the goats, it should easily be able to reconstitute a cedar forest "which should have the importance of an historical monument"(32).

Madon next turns to carob, which he notes is resistant to drought and to dry soil (1881: 31-32). He points out its soil binding capabilities, as well as its role in preserving springs. It plays an important role in Cyprus, since the cattle can be fed carob instead of forage, in which Cyprus has limited quantities. The carob fruit is currently the principal export of Cyprus, while the ungrafted trees are also used for fuel and making charcoal of the first quality (33).

Madon states that the golden oak, *Quercus alnifolia* (Pades), is peculiar to the island, and can be found only on the plutonic range, upon which they are widely spread. They appear in clumps throughout most of the pine forests, and sometimes these clumps are wide apart, other times they are close enough to form the mass of the standing timber. The space occupied by this tree increases as the number of pine decrease in the lowest parts. It is the predominant tree, interspersed with a few *Arbutus andrachne*, in the parts lying between the great pine ranges, from which the pine disappeared "owing to reckless felling" (1881: 33). It also spreads east as far as Makheras. "[F]rom the point of view of the ground covered by it, it holds the first rank even before the Aleppo pine. But it never attains a large growth, two feet in diameter at most, and grows very slowly" (33). It is used for wheels, tool hands, tannin and charcoal, but its principal use "is for binding the soil and thus facilitating the replanting of pine, for the goats can do but little damage to it, and it clings tenaciously to the most shifting stony soils: from this point of view one might say, that, if it did not exist it would be necessary to discover and establish it" (33).

[112] Baker presents himself as being the first to discover that this tree still existed on the island. It appears that the natives were fully aware of its existence, and Baker's discovery was only "new" in the sense of foreign explorers.

Turning now to location, Madon distinguishes between pine forests and forest lands of pine and cypress, about which he states that "the former are half ruined and the latter are, generally speaking, in the most pitiable state of decay" (1881: 34). He states that although he has approximated the areas of these regions, the areas can not be calculated well until a more advanced map of country becomes available[113]. As far as what constitutes a forest, according to Madon the pine forests, on the volcanic range of the southwest are the only forests on the island that still merit the name of forest. "The unqualified recklessness of the inhabitants which has greatly impoverished this tract, and which daily narrows its limits, has already divided it into two groups" (34).

Madon defines the first group (which now roughly equates to the Troodos Forest) as going from Kakopetria on the north, Prodomo on the west, Trooditissa, Platres and Phini on the south, and on the east of what he calls the abrupt slopes which crown the lower road from Limassol to Evrykhou. This is about 1200 acres (486 ha), half of which has *P. laricio* (4500 feet and up) and the other half Aleppo pine. *Arbutus*, *Quercus alnifolia*, barbary of etna are the underwood, but Madon notes that it is not consistent, but rather scattered. Juniper is near the summit in the shape of a few old big trees. In the valleys are plane and alder (1881: 35).

The second group (now roughly equivalent to the Paphos Forest), which is separated from the first by vines, plantations of *Quercus alnifolia* and ravaged forests, is bounded on north by Pyrgo and Xerovouni, on west by Yallia, on south by Tremithoussa and Panaia, and on the east by Kykko, Sakistras [Tsakistra], and Campo [Kambos][114]. The total extent of the forest in this area, without including any forest land is 80,000 acres

[113] Madon's description of the areas of these forests and forest lands is hard to follow, and at times it appears that his area suggestions do not properly add up. There are also what appear to be translation issues throughout the entire report, which might explain some of the issues with the acreage numbers as well.
[114] However, the forests only start about an hour's distance from these last three, as they are surrounded by a circle of cleared land. Further, Madon notes that whatever vegetation grows "up again in the valley and woods neighbouring Kykko is entirely destroyed by the perpetual plundering of that monastery" (35). This contrasts with his prior description of young cedar trees on the slopes near Kykko.

(32,375 ha). This forest can then be further divided the forests of Pyrgo, of Livadia, of Roisha, of Mavrosykes, of the cedars, of Lahaou, of Livrami, of Stavros, and of Aphrodites. These forests are almost completely composed of Aleppo pine, and Laricio pine is only found in a few groups on the highest summits. Cedar in this area is "only worthy of mention on account of their interest rather than of their number" (35). The underwood, which is very sparse, is formed by *Arbutus andrachne* and *Quercus alnifolia* (35). The combination of the two forest groups yields an area of about 92,000 acres (37,231 ha). Although Madon notes that they do still have some pines, he generalizes that they are "in a deplorable condition, except the forest of Aphrodites, which, owing to its retired position, has to some extent been preserved" (35).

Madon then turns to the location of smaller clumps of pine forest. On the Akamas promontory, he notes that pine can be found on 2500 acres (1012 ha). On the Kormakiti promontory, pine can be found on 7500 acres (3035 ha). The "ravaged" slopes between Troodos and Makheras, especially "the Kotsen, Dali, Geraeamino, Stavriniati, Magara, Mavrohomodo, Carauna, and Lithrodonda," contain perhaps 55,000 acres (22,258 ha) of sufficiently preserved forest, but it is quite fragmented (1881: 35). Thus, the total area of "forests" is around 150,000 to 160,000 acres (60,703 to 64,750 ha) (35).

Madon next describes the location of the areas he calls "forest lands of pine and cypress". These lands are primarily located on the lower slopes of the plutonic spurs, where there are large areas where pine forests are no longer found "except in small numbers and limited growth. Their extent is very great, but their condition variable." The area around the first group of Forests (defined above) has been attacked the most since it is near the plains, and this area is connected on the east with the remains of the once magnificent forests which formerly stretched to Makheras and Stavrovouni. The area around the second Group (defined above) is much smaller, comprising a narrow belt not more than 1 to 3 miles wide. Madon states that these two sections are separated on the

south by vines and cultivation which go as far as Platras and Prodromo, while on the north they unite between Lefka and Tsakistra (1881: 35). The external limits of these "forest lands" around the two "forest" groups can be shown by drawing a line passing by "Pyrgo, Xerovouni, Lefka, Evriku, Kyperounda, Moniates, Platras, Prodromo, Cinodas, Panaia, Sarama, Argaka, and Yallia" (35).

Madon states that there are also about 60,000 acres (24,280 ha) of forest land to the east of forest group one, mainly located at "Strombi, Arcobolombia, Asine, Coubri Kabri, Rotcha, Stagargo, Castana, Mavrohomodo, Vouni Silias, Mathrati, and Lithrodonda" (1881: 35). Further, there is forest land on about 10,000 to 12,000 acres (4047 to 4856 ha) of the spurs in the Limassol and Larnaca districts, as well as around 4000 acres (1620 ha) at Akamas, and 3000 acres (1214 ha) in the remainder of the Paphos District (35).

Madon also touches briefly on the forest lands in the Northern Range, noting that they are in a worse condition than those in the other districts and that it is difficult to distinguish forests from scrubs and rocks in the area. However, around "the crooked forest of Kormakiti" there are about 6000 acres (2428 ha) of forest, and there are 10,000 acres (4047 ha) of young cypress and pines between "Karava, Carmi and Kyrenian groves"; 5000 acres (2025 ha) around "Kilourga, Koutzovonti, and Hai-Grosh"; 10,000 acres (4047 ha) near Mandras and Platani Ardenna, and around 8000 acres (3240 ha) chiefly near "Haios Andronikos, Yialousa, Livnarissos, Rizocarpas, and Cantara in the Carpas". All told, this amounts to about 40,000 acres (16,187 ha) of forests, which has "nothing but young pine and cypress, disseminated in the bushes or lost among the rocks, but capable of being covered with rich forests if the plundering caused by the inhabitants and their goats was put a stop to" (1881: 36). Madon concludes his description of the forest and forest land location by noting that if the forest lands were combined with the forests, together they form the reserved forest lands, which would be about 240,000 acres (97,125 ha) (36).

Madon also describes the location of brushwood, dead wood, olive and carob trees. Brushwood forms "a very considerable portion of the Nahies of Kouklia, Andirnou, Episcopi and Limassol, in that range the limestone mountains are generally thickly covered with dead wood, 'Lentiscus' 'Cytisus' 'Calycotomos' from which some wild olive and carob trees spring up; the cypress and pines are rare and of very weak dimensions" (36). Phoenician juniper can sometimes be seen, which is used for "fuel and trivial uses" (36). Further, in this area "[o]ne portion of this surface might produce beautiful vines, but often the rocks are too superficial, the vegetable soil having been carried away by water since the destruction of the forests. These are to-day absolutely worthless and almost useless" (36). Madon suggests that the best option would be to simply graft olive and carob trees (36). Kyrenia and Famagusta Districts also have brushwood, especially on the lower hills. Lentiscus and juniper are most prevalent, and they "form almost impenetrable woods, but generally these lands are cut up by temporary cultivation" (36). He concludes this section by noting that the total area of brushwood (which is to what "the tooth of the goat" (36) has reduced the ancient forests) on the island is extensive, likely surpassing 400,000 acres (161,874 ha).

Following this description of the location and species within the forest, Madon turns to the condition of the forests, looking first at the composition and present state of the interior forests. His description of the forests' condition has not changed much over the year he has spent on the island since his previous report. He notes that "…everywhere the tract has been a great deal too much cleared by excessive fellings which have affected the capital rather than the interest, and very little of this wood having been utilised, renders the fact more regrettable, whilst the rest has been sacrificed either to the barbarous method of fashioning articles or left to rot on the ground" (1881: 36).

On top of the excessive fellings, Madon also emphasizes the damage sustained from resin-tapping, especially in light of his comments that the forests have a large proportion

of old forests, but very few young seedlings. Many of these old trees have been damaged by recent resin tapping (within the last twenty years) and will die within the next fifteen to twenty years. Since there are so few seedlings present to replace these old trees, "we thus have the certainty that the remaining forests of the island will not see the end of the century if radical measures are not adopted to put an end to this devastation" (1881: 36).

In the context of discussing the proportion of old trees to young trees, Madon also contrasts the position in Cyprus with that in a similar situation in Europe. In Cyprus, he states that it is not unusual to see pine trees of six to eight feet in circumference, and even ten to twelve feet in circumference is not extremely rare. In Europe, it would be odd to see trees larger than four feet in circumference in a forest as degraded as the ones in Cyprus (1881: 37). What is happening? "This very characteristic circumstance comes from the fact that the inhabitants, hardly ever making use of the saw, have every interest, except in special cases, in only felling trees of small caliber, which they can easily cut up with an axe" (37).

Thus, we have Madon's explanation for why so many old trees abound – the use of the axe, rather than the saw, by the inhabitants. But why are there so few young seedlings? As in his earlier report, Madon notes that "The absence of young seedlings, and, more generally of trees from one to thirty years old, is a fact of still graver importance; it is observable to an extraordinary degree throughout one-half the surface, and particularly in nearly the whole of the Troodos forest….on a soil so shifting as that of these slopes, this is the inevitable result of the abuse of pasturage" (1881: 37).

Madon is especially pessimistic of the future of the trees on the summits. There are currently old pines there, as they have escaped being felled because they are not near villages, but in the past century the inhabitants have begun cutting these trees on the summits. Young seedlings are very scarce, however, on account of both the action of goats as well as the frost and thaw (1881: 37). Therefore, "[w]hen the old trees fall,

having reached their term of existence, they will not be replaced. The forests will thus disappear, and with them the regular snowfall, the last springs, and, perhaps, the last rains[115]" (37). "This is exactly what came to pass in St. Helena, and this result is the more to be regretted because the Aleppo and Laricio pines yield seed in abundance, and reproduce themselves with the greatest care on the driest soils if only they are left to their own devices" (37).

Following this description of the forest condition, Madon turns to the condition of the "forest lands".

> After such a sad picture of the forests, properly so called, it is almost useless to dwell on forest lands, which I have separated from the preceding on account of their extremely ruinous condition. On their limits nothing meets the eye except stony denuded slopes, on which some stunted pine now and again is seen growing in deformed fashion out of the arid rock, and covered with cicatrices in the midst of a few younger seedlings that try in vain to establish themselves in the impoverished burning soil (1881: 37).

Within this picture of despair, Madon separates out three types of forest lands. The first are found near the sea, on the lower spurs of the Southern Range, where the trees are somewhat numerous and straight. However, the natives have also attempted to cultivate parts of the area, and the goats have destroyed any young seedlings (1881: 37).

The second type of forest land is composed of clumps of *Quercus alnifolia* and *Arbutus andrachne*, which are sometimes scattered and other times close enough to completely cover the ground. The oak is the more common species of the two of them. This pair of trees is commonly found between heights of 2500 to 5000 feet. It goes as far east as Makheras and Stavrovouni and as far south as the porphyric ranges and passes, slightly near Panaia. In general, in areas in which pine has disappeared on account of "reckless felling", the oak will move in and flourish, as it has the capability to send out

[115] This description, which Madon frequently repeats, is a prime example of a "crisis narrative" (the trees are on the verge of extinction, experience in other countries shows us that their extinction will not only harm the forests, but will also harm the entire island, we must act now), and the professional foresters make similar statements to this throughout the colonial period.

shoots from its trunk, and so it not as strongly effected by the damage caused to the soil and young seedlings by grazing herds (1881: 37).

Madon states that the third type of forest land is found in the northern chain, where, differing from the Southern Range, the mountains are bare of covering but the hills and plains are covered with "dense thickets". In this limestone setting, the *Quercus alnifolia* is not present, but instead cypress mixed with Aleppo pine can be found with an underwood of carobs, lentiscus, and Phoenician juniper (1881: 37).

Madon also devotes a section of his report to the "recent destruction of forests". Based upon the three "evils" which he argues caused and are continuing to cause the destruction of the island's forest, he notes that the "pine woods … have disappeared within so short a period as to be remembered by the present generation" (1881: 38). "[A]ccording a reliable testimony, the destruction of a great part of the forests of Machaera does not date back further than thirty years; on the southern littoral between Kouklia and Colossi, Mehemet Ali ordered felling of wood for the navy according to the recollection of the old people of the country, and now-a-days throughout the whole of this vast space it is impossible to find a 4-feet circumference" (38). Further, Madon notes the presence of many deserted lime kilns in the eastern Mesaoria on the plateau going from Lefknoniko to Lingoasi as well as in the stony desert between Famagusta and Larnaca near Tymbo and Pendria, and he suggests that forests used to exist in those areas before they were destroyed by lime burning (38). He closes this section with the dramatic statement that if care is not taken of the remaining forest of Cyprus, which is on "the eve of disappearing", "the Mediterranean will soon count one island less and one rock more" (38).

Summary of Early Colonial Foresters

The descriptions provided by the early foresters further emphasize a degraded landscape, but they also complicate the situation even more. For example, Wild (1879: 8)

complains that pine forests do not exist immediately near Kykko, but as opposed to blaming the monastery, he notes that the monks of Kykko have preserved a "small fine forest" of *P. brutia*. Wild also notes the presence of trees near another monastery, Trooditissa, again countering the idea that the monasteries are responsible for the most forest degradation.

Further, Madon's argument that much damage had been done to the forests in the two to three decades prior to his arrival is difficult to interpret. Turning first to his comments about trees damaged by resin tapping over the previous two decades, Madon's comments are even more confusing in light of de Montrichard's account from less than a decade earlier which urged further development of the resin industry in those areas of the forest that could support it. Are the trees bearing the marks of resin tapping reflective of de Montrichard's advice? If so, how does one explain the contradictions in elapsed time?

As another example, Madon's argument that much of the destruction of the trees around Makheras only dates back three decades, i.e. to 1850 does not fully mesh with the accounts of previous authors who had been lamenting the state of the Cypriot forests since the early 1800s and especially the mid 1800s, although it also does not fully contradict many of them. Unfortunately, Madon does not provide a clear reason as to why he argues this for the Makheras region; he merely states that he has reliable accounts[116]. Are his reliable accounts authors such as Unger and Kotschy, and therefore Madon is being influenced by their perception of the environment, or are his sources someone else, and perhaps Unger and Kotschy in the 1860s did see more destruction than someone would have seen visiting earlier in the century. If that is the case, however, what altered so as to cause this destruction? The historical accounts do not indicate a sudden massive change of industry at the time; at most, epidemics and droughts are mentioned during the

[116] One wonders whether the Gaudry and Damour (1854) map discussed in Chapter 3 has influenced his thinking. If so, as previously discussed, there are multiple difficulties in accepting that the map is fully accurate.

period, along with a gradually increasing population, but there is no indication that any of these changes can easily be used to explain forest destruction, except for the specific references to the suggested coastal deforestation by Egypt.

More generally, Madon suggests that there are almost 100,000 ha of forest in various levels of conditions on the island. De Montrichard had suggested 200,000 ha, with 100,000 ha claimed by the inhabitants for customary use. Madon also notes the presence of approximately 160,000 ha of forest land. De Montrichard does not separate forests and forest land in the same manner as Madon, and he instead notes the presence of 600,000 ha of waste land which could support shrubs or could also be barren. How does one interpret these different figures? Are they referring to the same amount of forest covered area, with the differences reflecting varying ideas about definitions of forest and degradation more than they reflect any physical change to the landscape?

A quote from Hutchins, who praised the appearance of the Cypriot forest during his 1909 visit, can be instructive in thinking through ways to answer the general type of questions above.

> It is greatly to the credit of the Cyprus Forest Department, that the lurid picture of ruin and desolation drawn by Sir Samuel Baker is now entirely a picture of the past. I spent nearly two months travelling through the forests, and during that time scarcely came across a mutilated tree, and I do not recollect seeing a single tree felled that could not be accounted for satisfactorily (Hutchins 1909:13).

As shown within the main text, the Forest Department was chronically under budgeted during much of the period that this renewal of the forests was said to occur, the PFO was not formally trained as a forester, and arguments were still waging over the demarcation of the forests even at the time of Hutchins visit, although he was shielded from them. It seems unlikely that such a tale of success could be attributed to a department with that many issues. Rather, the question of human subjectivity seems to be the key factor in this situation. Perhaps the forests were not in that “degraded” of a state at the time of British occupation, and Wild and Madon, as with some of the earlier authors, were over-

dramatizing the picture. Alternatively, perhaps Hutchins had a much more lenient definition of degradation than that of the early foresters, although that option seems unlikely given his long years in the colonial service. Either way, the accounts suggest that the accepted history of destruction and degradation can not and should not be taken at face value without careful questioning of the validity of the claims. For the present, the combination of these traveler's accounts along with the other sources of data currently available point to an hypothesis that the Cypriot forests in general have not been dramatically altered through the centuries. That is not to deny that localized changes may have occurred, but rather to emphasize the resilience of this Mediterranean environment, and the need for care in interpreting it.

Appendix V: Character Sketch of Unwin

VIEWS OF OTHER OFFICIALS

In 1931 Unwin was charged with extorting money and valuables, as well as acts of violence and assault on villagers in association with the uprising in 1931. The subsequent investigation into Unwin produced a variety of statements concerning his character and level of mental health (CO 323/1135/4). The following are a sample.

Gov. Storrs stated that Unwin was not mentally fit and that he would like to remove him from his position, but he did not think that this situation was grave enough to justify such a move. He also noted that Unwin would do better in a country where forestry was not an "anathema" to the people.

Dawe, in a letter to Darnley (May 5, 1932) noted that "It must be remembered that though he may be unbalanced and fanatical, he is a person of high scientific attainments and personal character that has devoted himself unsparingly to his work in Cyprus".

Darnley replies on May 18, 1932, with the statement that he was "not favourably impressed by Dr. Unwin's fanaticism as a forester, nor by his tendency to judge the Cypriots by British standards and even by British prejudices".

An individual named Wilson noted on May 19, 1932, that Unwin was "surely unbalanced" and he "cannot believe that a man of his temperament is fitted for the Colonial Service – but there he is and there is no question of getting rid of him" although "Cyprus was unhappy more for him".

Before the riots had occurred, Mr. Henniker-Heaton (the Colonial Secretary) spoke to Mr. Dawe "about Dr. Unwin's unbalanced state of mind and expressed a hope that he would leave the Cyprus service. Dr. Unwin is a fanatical forester, and has also had serious private worries in connection with the insanity of his wife. His judgment seems to be seriously impaired".

Extracts about Unwin which were contained within the Annual Reports of the Governor were also reproduced within this file. Beginning in January of 1927, Storrs stated that Unwin's "fiery and querulous temper render him, in effect, hardly a first class official". In December of 1927 Storrs stated that Unwin was still lacking "in tact and patience in the face of local ignorance and opposition, a defect which has handicapped his Department." In November of 1928 Storrs explained that Unwin had such enthusiasm for his subject that it was almost impossible for him to see "the trees for the leaves". He passes "into what Mrs. Browning calls Homer's garrulous godlike innocence and loses himself in a centrifugal pursuit of the unnecessary and the irrelevant". R. Nicholson, the acting Governor in January of 1929 stated that Unwin "is a fanatic where trees and goats are concerned and 'sees red' whenever he meets with opposition". Further "his lack of tact and intolerance of criticism have greatly hampered him" and he would do better "in a Colony where forestry was not anathema to the inhabitants as it unfortunately is in Cyprus". Storrs confirmed Nicholson's report in January of 1930, and in December of 1930 stated that Unwin would do better in a country where forests and forestry were in the least degree appreciated. The Colonial Secretary (Mr. Henniker-Heaton) stated in December of 1931 that Dr. Unwin "creates many difficulties for an administration through his autocratic methods with the villagers and his incurable conviction that he is always in the right." Storrs in December of 1931 stated that Unwin's "zeal and devotion is little short of calamitous to a politically minded colony so richly endowed with imaginary grievances as Cyprus". Finally, Storrs in a confidential letter addressed to the Secretary of State (Cunliffe-Lister), stated that "… the task of forest administration in Cyprus is beset with difficulty; but this difficulty, I am satisfied, has in a very large measure been aggravated by Dr. Unwin's temperament and methods. It would indeed be a great relief to my mind and the minds of my advisers if Dr. Unwin were to be relieved permanently of his duties", but his behavior during a time of crisis was not an appropriate way to remove him.

As can be seen by the above statements, there was a fair amount of concern about the mental health of Unwin within the colonial government; however, they could not find a proper way to remove him from his position. This concern is not immediately clear in the majority of documents concerning his forestry policies. Most people praised him, and by simply reading the published accounts one could easily form the opinion that Unwin had been a good forester, if just a bit harsh with the natives.

UNWIN'S OPINIONS ABOUT THE CORRECT TYPE OF FORESTERS AND CYPRIOTS

Unwin had specific views concerning how a forester should look and behave. For example, when he felt that the forest guards were becoming slack in their dress code, he sent out a memo with the requirements that the forest guards have on clean uniforms and clean boots in the morning[299], be shaven, and salute superior officers (SA1/1194/1921). As far as the behavior of foresters, in a letter to the Colonial Secretary dated Jan 31, 1928, Unwin stated that Cyprus was lacking men "who are not only thoroughly trained foresters, but also are imbued with the ideals and aims of the forestry profession" (CO 67/223/6). His views concerning behavior can also be seen in his request for money for better forest housing, as the current housing is inadequate and "it leads to work being done badly or scamped, and does not invoke that true spirit of a forester, which makes him desire to live in or at the edge of the forests under his charge". Further, he stated that those who prefer coffee houses and courts did not possess a true forester's ideal and *espirit de corps* in the forestry profession (CO 67/225/6).

Unwin also had several specific views about Cypriots. He frequently implied that the peasants were lazy or ignorant, and in the following example, he blamed the character of the peasants for unsuccessful attempts at reafforestation, stating that the "peasants are loath to take the necessary precautions in packing and subsequent care of the seedling"

[299] He is reasonable enough to understand that if the guards are walking around in the forest, as they should be, that their boots may not be clean in the afternoon.

(CO 67/225/6). He also complained in 1927 that Cyprus was one of the most disheartening countries to work in for a forester, as the people frustrated "the genuine efforts of forest conservation and the very motives of forest preservation are scouted" (SA1/535/1927). As a final example, Unwin viewed the peasants as ungrateful, as he stated that "Despite the enormous free gifts of fuel or grants to villagers at low rates, free grants of timber and fuel to monasteries, the enormous number of animals, especially goats, allowed to graze in the forests, still more is demanded in excess of the capacity of the forests" (*Annual Report of the Forestry Administration* 1927:14).

Unwin produced a report in defense of himself while the investigation discussed above was taking place. Within the report, which Storrs described as being "remarkable as much for its irrelevance as for its length", several more of his views concerning the Cypriots as well as glimpses at his own character can be seen. For example, he states that he had to fight against being influenced "by the sinuosities of the levantine mind" (9), and that the Cypriot morality cannot understand legal methods but rather "they only understand the primitive law that might is right" (23). Further, based on their tradition and their 3000 year history, "and from their anthropological peculiarities they appear to be of a slave mentality"[300] (24). He complained about the "profound black-ingratitude of the local, supposed, educated leaders of the people" (41), and stated that two doctors had commented to him that it was a wonder that he had not taken to drinking on account of the difficulties he had had with the Cypriots (59). Further, he had "never been able to hear of any other forest officer anywhere within the British Empire who has showed such patience in dealing with a backward, obstinate and pig-headed people" (54). As a final example of the comments he made within this report, he stated that he was so dedicated to his job that his wife "(in one of her sanest moments) considered [it] recently as a fair ground for divorce" (68) (CO 323/1135/4).

[300] Within this context, he states that an ethnological and anthropological history of the people and its bearing on their state of development needs to be begun, something which he helped to get achieved while in his previous appointment in Nigeria (41).

RECOMMENDATIONS FOR COMPANIES FOLLOWING RETIREMENT

The archives produced one final tidbit of information concerning Unwin's life. Immediately following his retirement, he submitted various applications to the government asking for the a) right to form an electricity commission, b) acquisition of felling rights in certain forests, c) right to form a water authority, d) charter to found a bank or financial house, and the e) right to make a geological, geophysical and soil survey (SA1/669/1936, SA1/647/1936, SA1/666/1936, and SA1/668/1936). He stated that his "sole desire is to help the country" (SA1/669/1936), and further that he wanted to revise and improve the financial condition of the peasants (SA1/665/1936). He appeared to have submitted an additional application in 1937 for permission to create a Cyprus Development Company that would have 25 subsidiary companies which would manage all of the Colony's activities, although I could not locate the original copy (CO 67/279/13).

His applications were denied rather summarily by the Colonial Secretary W.D. Battershill with the justification that for a) the government already had a scheme which would be more suitable and no further correspondence would be useful, b) a final reply would be sent but it was unlikely to be favorable, c) the government thought that this should be in the hands of a private company, d) one did not need a charter to form a bank, but the government would not be a partner in it; and e) the government could not grant him the concession. Mr. Battershill also reminded Unwin that following Sec. 17 of the Cyprus Pensions Order in Council 1929, his pension could cease if he became director or servant of a company dealing primarily with Cyprus unless he first obtained permission from the governor, and it was unlikely that the Governor would grant him permission. Upon being informed of these issues, Unwin immediately withdrew his requests, stating that he did not wish to break the regulations of the government (SA1/669/1936, SA1/647/1936, SA1/666/1936, and SA1/668/1936). His application from 1937 also met

with denial, although once again I could not find the specifics of the application (CO 67/279/13).

This situation is intriguing. Less than two months after he retired, Unwin was attempting to make money off of the natural resources of the Island, as well as the people of the Island. Within his request concerning the forests his prior concern with goats was greatly decreased, as he only mentioned them in a statement chastising the monasteries for still keeping goats and asking whether he could gain access to the monastery's land. Any beliefs he had concerning forest preservation seem to have been completely replaced with a desire to make money (SA1/665/36). The other applications also illustrate this desire to make money, and despite his statement that his "sole desire" was to help the Cypriots, he still did not appear to fully consider the people. One can see this within his request to make a geophysical survey, as one of his first demands was that the government "grant power of compulsory acquisition in cases of certain areas, where special difficulties arose, as to acquiring private rights over land" (SA1/699/1936). He may have wanted to improve the peasant situation, but only provided that the peasant did not have anything he wanted!

The officials reviewing these documents did not view them in too serious of a light. Because of his prior position, it seems as though they had to respond with tact in official documents sent to him, but the situation is different in the unofficial daily notes concerning the applications. The references in the State Archive materials were generally the most kind, as they simply questioned his plans. In the record contained within the Public Records Office, however, which contains notes written by Brits in Britain, the officials were a bit harsher. An individual named Cooke wrote to say that he had met with Dr. Unwin on one occasion, and "formed the opinion, now confirmed, that he is mentally unstable". At the same time, Dawe stated that Unwin would require that he was the "uncrowned king" of all of the boards of this "fascist organisation" (CO 67/279/13). It is clear that Unwin was no longer held in any semblance of respect.

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Vita

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